

THE IMPACT OF A JUNIOR COLLEGE  
INTRODUCTION TO SOCIOLOGY COURSE  
ON SELECTED STUDENT ATTITUDES

By

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A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF  
THE UNIVERSITY OF FLORIDA  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
DEGREE OF DOCTOR OF EDUCATION

UNIVERSITY OF FLORIDA

1974

## ACKNOWLEDGMENTS

The writer wishes to acknowledge the advice and assistance of Dr. Hal G. Lewis, Sr., Chairman of the writer's Advisory Committee. Without his encouragement to the writer to develop this study and his ready counsel in its preparation, it would not have been the learning experience it was. Sincere thanks is also extended to the members of the Committee, Dr. Arthur Newman and Dr. Gerald R. Leslie, whose willingness to permit the writer to investigate an area of immediate professional concern also contributed to the completion of this study.

Additional appreciation is also owed to the librarians of Seminole Junior College, Florida Technological University and the University of Florida for their aid in the preliminary research stage. To the faculty, staff and administration of Seminole Junior College the writer expresses his thanks.

Finally, the writer wishes to acknowledge the debt owed to his wife, Nelda, and two sons, David and Steven, for their tolerance and understanding during the long hours spent in the preparation of this study and for their unswerving confidence in its ultimate completion.

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Abstract of Dissertation Presented to the Graduate Council  
of the University of Florida in Partial Fulfillment of the  
Requirements for the Degree of Doctor of Education

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By

RICHARD LEE LOPER

June, 1974

Chairman: Hal G. Lewis, Sr.

Major Department: Foundations of Education

This study is an investigation of the impact of a junior college introductory sociology course on students. Impact was measured by pretesting and posttesting students on instruments measuring racial and ethnic attitudes, dogmatism, experimentalism, authoritarianism and a measure of radicalism-conservatism.

Two comparison groups were employed. One was made up of students at the community college who represented a broad sample of the student body. The other was a non-college group of students attending the adult high school and vocational-technical school of the same institution.

Pretest comparisons between the three groups indicated that the two college groups did not differ on any of the measures. Males in the introductory sociology course were found to be less

anti-black than the non-college males. The non-college males were found to be more dogmatic than either of the groups of college males. In addition, non-college males and females were more conservative than the community college sample, but not more conservative than the students in the introductory sociology course.

Posttest comparisons indicated that the sociology course had a limited impact on students. Approximately twenty-five percent of the males and females became more rational in their attitudes toward blacks and Jews by becoming less anti-black and less pro-Jewish. Twenty-five percent of the males in the introductory sociology course became more experimental in their personal beliefs. Further results indicated that eleven males became less dogmatic while the same number became more dogmatic as a result of the course. Otherwise, there was no measurable impact on students of the introductory sociology course investigated.

## CHAPTER 1

### INTRODUCTION

Among the more noteworthy developments of the recent past in American higher education is the growth of the community college. Developed originally to provide the first two years of a four-year academic degree, many community colleges have added a wide range of vocational and occupational programs. This growth is reflected in their increase in both size and number. Enrolling less than 155,000 students in 1948, twenty years later community colleges had increased in size by more than one million (11:75). By the early 1970's enrollment in over one thousand institutions exceeded two million (28:193). One third of all the first time students in higher education in the United States begin their studies in a community college while in California eighty percent of such students are in community colleges (24:16-17). In Florida, which has a highly developed community college system, two thirds of all first time in college students attend one of the state's twenty-eight public two-year community colleges (13:5).

#### The Community College Student

Operated generally on the basis of an open admissions policy, the "Open Door College" tends to attract students who are a relatively distinct group when compared with their age peers who attend senior



colleges and universities. Cross uses the term "New Students" to classify these most recent entrants into American higher education, defining them as students who score in the lowest one third of those who take traditional tests of academic ability (7:13). Roueche and Pitman define the "New Student" more broadly as being in the "lower two-thirds of the academic spectrum . . ." (36:7).

Community college students also tend to differ in social class origin. Karabel's recent review of the literature led him to assert that the evidence, variously employing father's occupation, father's education and family income, "demonstrated the lower-middle and working-class character of community colleges . . ." (18:527). Other evidence lends support to this view, noting that geographic accessibility is a major factor in community college attendance (36:3-4).

According to Cross, the majority of students who enter community colleges aspire for a baccalaureate degree, with most hoping to enter professional or managerial occupations (8:41-46). As these aspirations indicate, social mobility is one of the major reasons large numbers of students attend community colleges. As Karabel summarizes:

Students at two-year colleges, though generally of low to moderate economical and educational backgrounds, desire upward mobility in both education and career. Indeed, high aspirations among community college students, at least upon entrance, is one of the most consistent findings in research on the topic (18:531).

Offering easy access at a relatively low cost, the community college is an expression of the American desire for increased opportunity in education. The baccalaureate is the means by which many students

hope to be able to acquire the necessary credentials to move up the social stratification system.

In part the community college has been successful in responding to these aspirations. As Hartmann and Caple report, those students who receive their Associate of Arts Degree and then transfer to a senior college or university tend to do well academically (15). Critics, who are especially concerned with the academically untalented "New Students," are not impressed. After reviewing several studies concerning the rate of transfer from the community college to the senior institutions, Karabel concludes:

Whatever the precise figures, we can surely say that no more than half of the over 70 per cent of community college students who aspire to a bachelor's degree upon entrance transfer to a four-year institution (18:532).

Indeed, the term "Revolving Door" may be more appropriate in describing the community college than "Open Door". Many students who do not transfer simply drop out. Others are "cooled out" i.e. directed from transfer into various occupational or vocational programs (5:160-61). Thus for many students their first and last experience in higher education is at a community college.

#### Community College General Education

Since a major purpose of the community college is to provide students with the first two years of a four-year program leading to a baccalaureate, providing general education is an important function of these institutions. General education programs exist in two major forms (47:198). In some institutions comprehensive courses in the broad

areas of English, science, mathematics, social science and humanities are designed specifically for the general education student and are required of all students. The other pattern is to provide students with a series of introductory courses within these various areas from which they are either free to select a specified number or required to take a specific combination or sequence.

In the area of social science these two patterns may be easily illustrated. When the comprehensive model is adopted students are required to take one or more "core" courses. Such courses are usually designed to cover most of the major social science disciplines, making special effort to emphasize their inter-relatedness. If the alternative pattern is utilized, students must complete some combination of the various introductory courses in the social sciences, often with some measure of student choice permitted. This pattern has the advantage of economy, particularly in the small or beginning institutions, since introductory courses can be used for purposes of both general education and major field requirements.

Seminole Junior College, a six-year-old institution located in Sanford, Florida with a full time enrollment of 2,400 students in the fall term of 1973, is typical of this second approach in its social science requirement. Although the courses Social Science 1 and 11 are listed in the college catalog, neither is mandatory for completion of an Associate of Arts Degree. That requirement may be met by completing three separate courses. One must be Western Civilization 11, a historical survey from 1700 to the present. The two additional

courses may be selected from a more or less standard offering of freshman and sophomore level social science courses in the areas of anthropology, economics, geography, government, history, psychology and sociology.

### The Problem

The purpose of this study is to examine the impact on Seminole Junior College students of one of those courses: Introduction to Sociology. The course is self-selected by students seeking an Associate of Arts Degree. Similar to the entire social science requirement, the course may be taken during any term of the student's program and like other social science courses is given three semester hours credit. It is required only for law enforcement personnel working for an Associate of Science Degree in the institution's Criminal Justice Technology program.

The problem then, is to determine in what ways, if any, students who elect to take the course differ from the general body as well as determining in what ways, if any, students change as a result of taking Introduction to Sociology. This study will focus on those changes which may occur other than gains in content knowledge. This is not to imply that content is unimportant. Sociology does provide students with valuable elements of a general education (22,26,40). Such gains in content knowledge are crucial in every academic course and are easily measured through the use of formal content examinations.

Yet it has also been argued that a college education is not confined exclusively to the acquisition of knowledge and skills.

In their study of the impact of community colleges on students

Plant and Telford suggest that:

Among the incidental and indirect consequences of formal collegiate education are changes in personality traits, ethical and moral characteristics, attitudes and values. Many educators would claim that these outcomes of formal education, other than purely intellectual, are its real goals and that the inculcation of knowledge and the acquiring of skills are only the means of attaining the ethical and moral outcomes (29:3).

It is with these informal, assumed and perhaps unintended outcomes of a college education that this study is concerned.

### Introduction to Sociology

As taught by the researcher, Introduction to Sociology employs lectures, films and classroom discussion of the course content. Student initiated discussion is permitted and encouraged throughout the entire term. A basic text, Popenoe's Sociology is required for all students (30). A collection of readings is employed for general education students (37). For law enforcement personnel a separate collection of readings is required, dealing more specifically with the sociological aspects of criminal and delinquent behavior (16). Topics covered during the term include culture and society, primary groups, social stratification, ethnic and racial minorities, education, deviant behavior and social control, politics and collective behavior.

On a statewide basis introductory courses in sociology have proven attractive to Florida community college students. During the 1971-72 academic year 10.9 percent of the credits earned in

the social sciences were earned in such courses\*. At Seminole Junior College nine percent of the credits earned in the social sciences during the same period were earned in Introduction to Sociology. There is no assurance that Seminole Junior College students who take this course are typical of students at other community colleges. Nonetheless, it is believed that the results of this study will lead to insights useful to other community colleges.

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\*Kenneth E. Jarret, Consultant, Department of Education, Division of Community Colleges. Personal communication, June 5, 1973.

## CHAPTER 11

### REVIEW OF THE RESEARCH

For the purposes of this study a review of the available research was conducted in three interrelated areas. Primarily, a search was conducted in order to determine if studies concerning the impact of introductory sociology had been reported.

In a broader sense, however, it seemed necessary to determine first whether the experience of higher education itself has an impact on students. This general concern was divided into two parts, one dealing with the issue of impact as it relates to the four-year college experience and the other concerning the impact of the two-year community college. Since the available research in terms of the impact of higher education is voluminous, it was further decided to rely primarily on attempts to summarize those reports in conducting this review.

#### College Impact

One of the better known summations of studies concerning college impact is Jacob's 1957 study, Changing Values in College (17). In general Jacob argues that college has little effect on student values. The major result of higher education seems to be "more homogeneity and greater consistency of values among students at the end of their four years than when they begin." Moreover, the changes

which do occur are "rarely drastic or sudden. . ."

To call this process a liberalization of student values is a misnomer. The impact of the college experience is rather to socialize the individual, to refine, polish or "shape up" his values so that he can fit comfortably into the ranks of American college alumni (17:4).

He does conclude, nonetheless, that some changes do result from college attendance. A tendency toward decreased acceptance of authoritarian statements is observed (17:45-46). In addition, higher education also tends to lessen racial and ethnic prejudice. Yet even this apparent change in attitude reflects shifts in the country at large of which college is merely one part. "There is thus no fundamental effect of education on prejudice but only a modest tempering of the prevailing mood" (17:48).

The recent review by Feldman and Newcomb is more positive (12). Despite the obvious difficulties of generalizing across a wide variety of institutions, they do conclude that substantial change does occur as a result of the college experience. Reviewing a large number of studies, many of which were conducted after Jacob's earlier investigation, their conclusions are admittedly "more optimistic than Jacob's" (12:4). They found that certain changes:

are characteristic of nearly all American colleges. . . . Most salient are increases in "openmindedness" (reflected by declining authoritarianism, dogmatism, and prejudice), [and] decreasing conservatism in regard to public issues. . . (12:48).

#### Community College Impact

Insofar as the impact of community colleges is concerned, the literature is largely silent. Koos' recent review revealed only one



such study (19:314-47). As he subsequently observed:

Reports of inquiries in this area are almost nonexistent and, for the most part, concern qualities of personality or attitudes at a given time, as at admission, without looking into any influence of attendance on its programs (20:7).

The only study of community college impact is reported by Plant and Telford (29). The design identified three groups of subjects. One group was made up of students who completed, between 1960 and 1962, three or four semesters at one of six California community colleges. A second group was those students who had completed less than three semesters. The third group, although intending to enter one of the six institutions in 1960, had not actually done so and had not attended any college during the two year period under study. In 1960 and 1962 these three groups were tested using five scales from the Gough California Psychological Inventory, the Rokeach Dogmatism Scale and the Allport, Vernon, and Lindzey Study of Values.

On the five scales from the Gough California Psychological Inventory significant differences were recorded for both males and females between 1960 and 1962. The changes, however, were the same for all three groups.

It was concluded that the CPI scale results indicated a general personality change underway apart from the amount of educational experience of the groups of subjects (29:31).

Similar results were obtained on the Rokeach scale. All groups demonstrated significant decreases in Dogmatism, indicating a "general personality change underway apart from the amount of education of the groups of subjects" (29:32).

Likewise, the data generated by the Allport, Vernon, and Lindzey instrument showed no changes attributable to community college attendance. The authors suggest "that if there is relative change in values associated with increments of college that change is minimal" (29:33).

### Impact of Introductory Sociology

The review of the literature concerning the impact on students of introductory sociology courses may be characterized as inconclusive. Over a dozen studies are reported, most done in the 1930's and 1940's, revealing no consistent pattern insofar as student attitude change is concerned.

Typical of this ambiguity are a series of reports by Smith which cover more than a decade of research (41,42,43,44,45,46). Conducted in the Elementary Sociology course at the University of Kansas, Smith used standard instruments, Drobra's Attitude Toward War scale, Hinckley's Attitude Toward the Negro scale and a series of Thurstone scales, to measure attitude change. Substantial changes are reported in attitudes more strongly favoring birth control, increased antagonism toward communism, increased pacifism and decreasing respect for law (42,45,46,41). Other attitudes which did not change were those toward blacks and capital punishment (43,44).

Lacking control groups in any of his reports, Smith is reluctant to attribute those changes which did occur to the sociology course he studied. "In other words, the precise cause of the changes is not known" (46:31). For example, even though more class time and materials

were devoted to war as a topic than to birth control:

The fact that attitude toward birth control showed a greater and more reliable change than war attitude suggests that the sociology course was not responsible for a very large part of the latter change, but that other factors, such as university courses, extra-curricular discussions, and various extra-university influences have considerable effect (42:26).

Zeleny's study is essentially a comparison between the lecture method of instruction and small group discussion, in a college sociology course at State Teachers College in St. Cloud, Minnesota (50). Presumably, it was an introductory course. As part of the comparison the author's attitude scale was administered to both groups (49). The scale was made up of thirty-four items with a true-false response format. The items themselves were reviewed by qualified judges who validated the accuracy of the statements. Change scores were calculated for both groups and compared. The small group discussion subjects showed more change than those in the lecture sections, but changes were not statistically significant.

Remmers and Salner report the effect of an Elementary Sociology course taught at Purdue University (32). Using Harper's Social Study, a measure of liberalism, they found "a definite rise in liberality score. . . between the beginning and the end of the semester" (32:351). In addition they found that sociology students were significantly more liberal than a group earlier tested in an Elementary Psychology class, also at Purdue.

Gerberich and Jamison, using their own seventy-five item

instrument, report the results of their study at the University of Arkansas (14). Classifying the individual items into eight categories, Criminology, Governmental Policies, Industry, Marriage and the Family, Modern Institutions, Religion, Race Problems and Trends of Civilization, they found a general tendency toward decreased conservatism.

With the exception of items dealing with race problems and those concerning industry, all changes are in the direction of a less conservative final attitude (14:123).

Using the Bogardus Social Distance Scale, Porterfield conducted posttest only comparisons between sociology students and non-sociology students at Southeastern Oklahoma Teachers College (31). Although making no claims of statistical significance, he does report that sociology students:

whether they have had courses in race relations or not, showed themselves somewhat more friendly than nonsociology students toward peoples other than their own (31:542).

Menefee constructed a scale of statements which reflected the specific content of his sociology course as taught at the University of Washington (25). Validated by nine judges and the author as to their truth or falsehood, the forty item instrument was administered as a pretest and posttest. Presumably as a result of the course, student agreement with items rose from 65.3 percent to 79.3 percent.

The generalization that stands out from these results is that the reactions of college students on questions of fact and opinion do change considerably during one quarter of instruction. The consistency of this reaction is seen in the fact that on every valid question the change was a positive one, that is, toward greater agreement with the standard agreed on by the experimenter and the other judges (25:548,52).

Grouping the forty items into eight topics, Conservatism, Radicalism, Economics, Socialism and Fascism, Race and Ethnocentrism, Labor, Civil Rights, War and Peace, and Heredity and Instincts, Menefee notes that some changes were stronger than others. Thus, "conservatism in general, antisocialist and antilabor sentiment, and race prejudice changed drastically" (25:554).

Cuber, at Kent State University, constructed his own scale to measure the effect of an introductory sociology course on student attitudes (9). The twenty-nine item instrument was designed to reflect the specific content of the course studied. Response options were a simple yes, no, or undecided format. Although no statistical claims were made, percentage changes between the pretest and posttest indicated that the course did change student attitudes "materially" (9:492).

More recently, Lagey investigated the impact of Introductory Sociology, Introductory Anthropology and Social Disorganization at the University of Wisconsin (21). Using Thurstone type attitude scales, he studied the effect of the courses on attitudes toward blacks, evolution and criminals. All three courses produced significant change in the direction of a more humane attitude toward criminals. Otherwise, there was no change, prompting Lagey to observe that "certain attitude areas, such as attitudes toward evolution or towards the Negro are resistant to change" (21:311).

#### Summary

Despite the fact that college and university attendance does appear to produce some changes in student attitudes, the same cannot

be said for community colleges. Such claims cannot be made simply because the whole area is virtually unexplored. Indeed, the one study that does exist rejects any notion that community colleges have any impact on students whatsoever.

Insofar as introductory courses in sociology are concerned, the literature presents a picture of mixed results. For example, Smith, Gerberich and Jamison, and Lagey all found student attitudes toward blacks did not change, while Menefee reports the opposite. Porterfield's report that sociology students were friendlier toward other racial and ethnic groups is virtually useless since the study design employed only a posttest.

Four of the studies, those by Zeleny, Gerberich and Jamison, Menefee, and Cuber, employed author constructed scales. The exact nature of those scales is not specified in any of these studies. In a general sense, each of the instruments probably falls closer to the liberal-conservative dimension of attitudes than any other. On this basis, there is a tendency for introductory sociology courses to decrease student conservatism, in some cases with statistical significance, in others not. Smith, Remmers and Salner, and Lagey report decreases in conservatism using standardized instruments and, as is the case above, statistically significant decreases are noted in some, but not all, of their reports.

It should also be noted that with one exception, all of the studies discussed suffer from one obvious defect. Only the Lagey investigation employed comparison groups, the others did not. Thus

whatever conclusions are drawn in the above studies, they can only be taken as tentative.

In conclusion, the literature is simply unclear concerning the impact on student attitudes of introductory sociology courses in the community college setting. Hopefully, this study will contribute to the clarification of this problem.

## CHAPTER 111

### DESIGN AND INSTRUMENTS

#### Design

The basic experimental design employed in educational research is referred to by Campbell and Stanley as the "Pretest-Posttest Control Group Design" (4:13). Controlling for all rival hypotheses concerning internal validity, this design involves the use of two groups into which members of a population are assigned randomly. Both groups are pretested and posttested. Assuming that randomization has been adequate, as the pretest should demonstrate, posttest score differences may then be attributed to the treatment which has been administered to the experimental group and not to the control groups.

With one qualification, this basic design has been employed in this study. That qualification has to do with the criteria of random placement of subjects into both experimental and control groups. Since the course Introduction to Sociology, the experimental treatment, is self-selected by students, randomization could not be achieved for the experimental group. Western Civilization 11, on the other hand, is a required subject, and, like Introduction to Sociology, may be taken by students at any time they choose during their degree program. During any one term, then, students in these history classes represent a broad, although not necessarily random, sample of the student body.



For this reason students in Western Civilization 11 were used as the control group. The specific history sections chosen were matched as closely as possible with the sociology classes in terms of time period offered. Finally, students in both groups were pretested to determine if the self-selection process which brings students into Introduction to Sociology reflects student attitudes and values which differ from the student body as represented by enrollment in the history classes.

Due to the length of the terms during which this investigation was conducted, it was thought necessary to further modify the basic experimental design. Seminole Junior College operates on what might best be termed a modified trimester system. Terms I and II, September to December and January to April, respectively, are each fourteen weeks in length. During those fourteen weeks, three credit courses meet the equivalent of three fifty-five minute periods each week. Terms IIIA and IIIB, April to June and June to August, respectively, complete the remainder of the school year. During these two terms three credit courses meet for five sixty-five minute periods each week. Since a portion of this investigation was conducted during those relatively brief terms of seven weeks, it was decided to employ the "Solomon Four-Group Design" as described by Campbell and Stanley (4:25).

In this design two additional groups are added to the basic experimental design as a means of controlling for the possible rival hypothesis of test-retest reactivity i.e., the possibility that subjects are reacting to the pretest itself, rather than the variable being investigated. The two additional groups in this design, one of which receives the experimental treatment while the other does not,

are both posttested only. By comparing the scores of the group which is both pretested and posttested with the scores of the group which is posttested only it is possible to measure whether or not testing itself has produced the changes. This design was used during Terms 111A and 111B. It was hoped that the possible effects of such test-retest reactivity could be determined early, viz., at the end of Term 111A and appropriate steps taken during Term 111B, if necessary.

Such posttest comparisons necessitate being able to identify those students who have been pretested and those who have not. A further need to be able to identify individual student scores also exists. Mean pretest and posttest score comparisons are widely employed to measure student change. Miller, however, has found that such comparisons can be misleading (27). Since both positive and negative numerical change are possible, mean scores may "mask" extensive change, leaving the researcher to draw the conclusion that little or no change has occurred. For example, students who scored high on the pretest may change and score low on the posttest, while low scoring students on the pretest may score high on the posttest. The net effect of such changes could then be to produce essentially the same mean scores and standard deviations, thus implying that no change had occurred, when in fact the opposite was true. Thus, it was decided that an attempt to identify student pretest and post-test scores would be desirable.

As a means of coping with the problem of masking as well as providing the necessary data to employ the Solomon Four-Group Design, students were requested to indicate, in addition to sex, race and age, the first and last initials of their mother's maiden name on both pretest and posttest questionnaires. In this manner it was possible to protect respondent anonymity and, at the same time, provide information concerning individual student change.

One additional group was included in the design of this study. A consistent criticism of college impact studies has been the relative lack of non-college subjects with whom to compare those who do attend college (12:64-68). This lack of any kind of control group in college impact studies significantly lessens the certainty with which claims about the impact of college can be made. Although this criticism has less validity if applied to studies of individual courses, such as this one, it does seem possible that college attendance alone, even during the course of one term, could influence student attitudes and values regardless of courses taken.

In order to control for this possibility, a third group of students was employed as a comparison group, matched as closely as possible on the basis of sex, age and race with both college groups. These were students attending the Vocational-Technical School and the Central Adult High School, both of which are located on the campus of Seminole Junior College. Requirements for attendance at either school are minimal. Students must be at least sixteen years of age and, for the high school, officially withdrawn from their previous school.

### Instruments

Instrument selection was made in light of several criteria. First, scales were sought that would provide some measure of the impact of general education, which, as suggested above, is at the core of the community college transfer program. Secondly, scales reflecting the particular content of Introduction to Sociology, the experimental variable, were sought. Another criterion had to do with the two major conceptualizations of the nature of attitudes. According to Shaw and Wright, these two conceptions differ essentially in terms of the "degree to which attitudes may be considered to have a specific referent" (39:2). One view is that attitude refers to a subject's response to a specific object or class of objects. The other view argues that attitudes are reflective of a "generalized and pervasive disposition of the person" (39:2). It was beyond the scope of this study to argue for either of these conceptualizations, although Shaw and Wright observe that the more widespread view is the former. Due, however, to the relative paucity of research in the area of concern of this study, it was thought wise to attempt to select instruments which would reflect both schools of thought.

Certain more mechanical considerations also influenced the selection procedure. In general, lengthy scales were avoided since it was believed from the outset that several would be used in combination. Scales which were constructed with both negatively and positively stated items were also sought. This technique of scale construction seems to control for response bias, i.e., the tendency of respondents, once they

understand the general drift of the scale, to respond to that general drift and not to the content of specific scale items (10:116).

### Experimentalism

Virtually every introductory textbook in sociology devotes space to the description of sociology as a science, arguing that the discipline involves the application of the scientific method in understanding and explaining human behavior. Presumably, the study of sociology should result in students realizing and accepting the utility of science in understanding and coping with their social environment. Brown's recent review of John Dewey's philosophy of experimentalism expresses this view of science. Experimentalists, Brown suggests:

are generally committed to the belief that human beings, living together in societies, can learn to transfer the experimental method used in the natural sciences to the areas of the human and social sciences (2:53).

Brown, who as an educator was interested primarily in teachers, developed three measures reflecting Dewey's experimentalism, each of which was designed to determine the extent of agreement by teachers with that philosophy. One of those measures, the "Personal Beliefs Inventory," measures the degree to which respondents' personal beliefs correspond with the philosophy of experimentalism. For the purposes of this study, it is argued that this scale measures the extent to which respondents accept as useful the scientific method in comprehending man's social behavior and should, thus, measure the impact of Introduction to Sociology on some of the personal beliefs of students.

The inventory developed by Brown is made up of two twenty item forms, A and B. Each form reflects the six basic beliefs of experimentalism by including both positively and negatively worded statements reflecting those six categories. The six categories, in turn, reflect the experimentalist view of continuity between mind and body, permanence and change, science and morals, emotions and intellect, freedom and authority and knowing and doing.

The items were developed through Brown's analysis of Dewey's major works. From those works a series of statements were extracted. These statements, in turn, were submitted to professors of philosophy and professors of educational philosophy for their judgment concerning whether or not the items agreed or disagreed with experimentalism. Forms A and B were administered to education students at the University of Wisconsin for tests of reliability, yielding a score of .58 for both forms. Additional testing of other education students produced reliability coefficients ranging from .55 to .78.

For the purposes of this study it was thought necessary to select from both forms A and B a series of items which would reflect the basic intent of the instrument and, at the same time, be comprehensible to the various groups to whom it would be directed in this study. As indicated above, community college students, as a group, tend to have lower achievement test scores than college students at senior institutions. Obviously part of the difference in such scores can be accounted for in varying reading and comprehension abilities. In light of these considerations, the selection of twenty items from forms

A and B was made. As indicated below, the selection process attempted to reflect each of the six basic beliefs of experimentalism, with items stated both positively and negatively.

1. Items Involving Mind and Body

1. Man doesn't have a "spirit" which is separable from his body and the material world.
2. There is no spiritual realm which lies beyond man's experience in the natural world.

11. Items Involving Permanence and Change

3. What is right and good at one time and place may not be right and good for all times and places.
4. All "truths" are relative.
5. Nothing is or can be unchanging, absolutely certain.
6. You can never prove that any fact is unconditionally true.
7. There can be no final, absolute ends to which all men aspire.
- \*8. Reaching a condition in which there were no problems would be the ideal life.
- \*9. To know something is to know the inner nature of things, i.e., as they really are prior to investigation.

111. Items Involving Science and Morals

10. Questions of value and moral judgment ought to be open to experimentation.
11. Questions of values and morals should be taken out of their traditional supernatural setting and put in a naturalistic setting.
- \*12. The ends and laws which should regulate human conduct have been determined by the superior intelligence of an ultimate Being.

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\*Items which disagree with Experimentalism.

## IV. Items Involving Emotions and Intellect

- 13. Man's primitive impulses are neither good nor evil, but become one or the other according to the objects for which they are employed.
- \*14. In the absence of a moral code supported by absolute authority, bodily appetite and passion overpowers intelligence.

## V. Items Involving Freedom and Authority

- 15. Change is a basic characteristic of nature, and man has some measure of control over this change by using his intelligence.
- 16. Man is capable of managing his own destiny in an understandable and predictable natural world.
- \*17. Man's destiny is in the hands of a supernatural power.
- \*18. Man's destiny is determined by circumstances of nature which are beyond his control.

## VI. Items Involving Knowing and Doing

- \*19. Truth exists ready-made somewhere; the task of the scholar is to find it.
- \*20. Knowledge is the sum total of what is known, as that is handed down by books and learned men.

Students are directed to respond to each item by indicating degree of agreement or disagreement. For the purposes of this study the instructions and response made which preceded the items are those used by Rokeach:

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

---

\*Items which disagree with Experimentalism.



- |                          |                                     |
|--------------------------|-------------------------------------|
| +1: I AGREE A LITTLE     | -1: I DISAGREE A LITTLE             |
| +2: I AGREE ON THE WHOLE | -2: I DISAGREE ON THE WHOLE         |
| +3: I AGREE VERY MUCH    | -3: I DISAGREE VERY MUCH (35:72-73) |

For scoring purposes negative items are reversed, i.e., a student who responded -3 to a statement which disagrees with experimentalism was scored as a +3. Then +4 is added to each response, resulting in a response range of 1 to 7 for each item, with a no response scored as 4.

### Dogmatism

The widely used Dogmatism scale, developed by Rokeach, was selected for this study because it represented that school of thought regarding attitudes which views them as expressions of a generalized personality disposition (35). The concept of dogmatism took as its starting point the earlier work of Adorno, et al. in the Authoritarian Personality (1). The F scale, F standing for fascism, was developed by Adorno to measure the kind of authoritarian personality which would be attracted to fascist ideology. According to Rokeach, the F scale came to be misconstrued as a measure of a more generalized and non-ideological authoritarianism when, in fact, it measures only rightist authoritarianism (35:13). Rokeach argued that intolerance and authoritarianism are personality characteristics which may be exhibited by people who are not fascist and thus he views the F scale as having limited utility.

Dogmatism, as used by Rokeach, refers to the degree to which an individual's belief system is open or closed. The extent to which the

belief system is open is:

the extent to which the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation arising from within the person or from outside (35:57).

Internal factors which may influence behavior, but which are irrelevant to a particular situation, could be various mental habits, beliefs, biases and stereotypes. Irrelevant external pressures could be those of reward and punishment exercised by individuals and groups other than the person himself.

Based on this definition, Rokeach developed a sixty-six item D scale, and a shorter forty item E scale, the latter being the "best" forty items of the original sixty-six. Using college students as subjects test-retest reliability ranged from .68 to .93. Field testing of the scale confirmed this conceptualization of dogmatism. English Conservatives and Communists, poles apart on the F scale as well as ideologically, both scored high on the D scale as Rokeach had hypothesized (35:109-120).

Both forms of the D scale are unidirectional, i.e., agreement with the statements is assumed to represent a closed mind, while disagreement is taken to be indicative of an open mind. This form of item construction creates the possibility of response bias as indicated above, especially in its longer sixty-six item form. For this reason, as well as time considerations, in this study a shorter, twenty item, version of the D scale was adopted. This version, developed by Troidahl and Powell, is made up of twenty items taken from the original sixty-six and correlates with the forty item E

scale at over .90 (48). Directions, response mode and scoring are the same as were used for the Experimentalism scale discussed above.

### Radicalism-Conservatism

Robinson, et al., in their review of seventeen scales of liberalism and conservatism, observe that while this dimension of attitudes has long intrigued scholars, it has proven difficult to develop instruments which accurately explain political behavior (33:79). Their major utility occurs when they are administered to elite populations such as well educated respondents. In spite of these general criticisms, Robinson and Shaver, in a companion work, view one of these instruments as containing some of the "better written and less dated items . . . and content from a variety of areas" (34:370). The scale to which they are referring is the Radicalism-Conservatism instrument developed by Comrey and Newmeyer (6).

From an original pool of 120 items tapping twenty-nine socio-political variables, two thirty-item forms were constructed. No test-retest reliability is reported. Factor analysis generated items reflecting thirteen of the original twenty-nine socio-political variables. The thirteen variables are religiosity, pacificism, welfarism, anti-unionism, weak federal government, moral censorship, contraception, racial tolerance, severe treatment of criminals, capital punishment, service to country and to the individual, and world government. Form B, which correlates with Form A at .96, was used in this study. Nine of the thirty items were negatively stated. Scoring, as recommended

by the authors, involves the use of a nine-point Likert scale ranging from agree very strongly to disagree very strongly. For the purposes of this study, the response range was reduced to seven points, with respondents instructed to follow the same directions as employed for the two instruments indicated above, i.e., from +3 for strongly agree to -3 for strongly disagree. Scoring, likewise, was the same.

### Prejudice and Rationality

This scale, constructed by Schuman and Harding, was selected because of its obvious relevance in measuring the impact of Introduction to Sociology on students' racial and ethnic attitudes (38). Unlike many scales which deal with racial and ethnic attitudes, the Prejudice and Rationality scale was judged appropriate for use in classes in which students who themselves were members of the minorities to which the items referred were found. In addition, the scale was highly rated by Robinson, et al. in their review of thirteen instruments which attempt to measure this dimension of attitudes (33:203).

Schuman and Harding argue that most conceptualizations of prejudice refer to prejudice as "attitudes or actions that depart from certain widely shared standards" (38:353). These standards, or norms, are "rationality," a willingness to modify one's opinions in the face of factual evidence and a desire to avoid overgeneralization and prejudgment, "justice," which requires equal treatment for all people in the public sphere regardless of ethnicity, and "human-heartedness," the emotional acceptance of others without regard to ethnicity.

Using this broader conceptualization of prejudice, the authors view the phenomena as having two distinct dimensions. One dimension is rationality, while the other, a combination of justice and human-heartedness, reflects the feeling dimension. The scale, thus, purports to measure irrationality and rationality as well as the positive and negative feelings of respondents.

The dimension of rationality is measured by providing respondents with two statements about ethnic or racial minorities from which they are to select the one which is "more correct." For example:

- A. Black people should be given every opportunity to get ahead, but they could never be capable of holding the top leadership positions in a country like ours.
- B. Some of the ablest and most intelligent people in the United States are black people.

In this case, B is the more rational choice. Persons who select A are indicating both irrationality and prejudice against blacks. A respondent who selects B, however, may do so for one of two reasons. He may do so because he recognizes it as the most rational choice of the pair or he may reject A because of its patently anti-black tone. Thus, if B was chosen for this latter reason, it was not rationality but rather feelings which most strongly influenced the decision.

To measure this possibility, other pairs of statements are included in the scale in which the irrational choice is apparently pro-minority in tone, while the rational choice seems to be anti-minority by comparison. For example:

- A. Some black people are clean and some are dirty, but the average black person does not differ in any way in his personal habits from the average white person in the United States.

- B. One must admit that many black people in this country do not live up to the standards of cleanliness usually expected among better educated people.

In this instance, B is the more rational choice. Persons who select A in this pair of statements are indicating irrationality, but in this case that irrationality is expressed in favor of blacks.

In addition to selecting the "more correct" statement in each pair, respondents are also requested to indicate the certainty with which that choice is made: not very sure, moderately sure and very sure. As scored by the authors, persons who select the more rational statement in each pair, regardless of the degree of certainty expressed, are given a score of 1. Persons who selected the irrational choices are scored according to the degree of certainty expressed; not very sure is 3, moderately sure is 4, and very sure is 5. A no response is scored as 2. This particular scheme was used rather than the more obvious seven-point Likert scale because the authors believed that to score persons who chose the rational statement in the pair in terms of the degree of certainty expressed would have implied a dogmatic tone which stands in contrast to the openness connoted by the notion of rationality. Thus, degree of certainty was disregarded by the authors whenever the more rational alternative was chosen.

The scale consists of forty-eight pairs of statements. In twenty-eight of the pairs the irrational statement is taken to reflect irrational bias against ethnic groups, while in the other twenty-four statements the irrational choice reflects bias for ethnic groups. For scoring purposes, this form of construction results in two scales; in the former case an anti scale, in the latter case a pro scale. For

the purposes of the instrument, the authors state that rationality:

does not refer to formal logic or incontrovertible fact, but rather the everyday logic and probable fact involved in statements and counter-statements of daily conversation (38:357).

The rationality of each of the pairs of statements was tested by asking three "experienced social scientists" to judge each of the pairs. The resulting acceptable items were included in the final form of the questionnaire.

The pro and anti scales are made up of three distinguishable subscales of eight items each, dealing with blacks, Jews and a variety of other ethnic groups such as American-Indians, Puerto Ricans and Chinese-Americans. On a sample of 229 Boston adults, the authors found that the internal consistency reliability coefficient was .84 on the anti scale and .78 on the pro scale. For 112 freshman women in a New England Catholic college the coefficients were .81 and .76, respectively.

For the purposes of this study the instrument was somewhat modified. All items which referred to "Negroes" were changed to read "Blacks." Since it was also believed that a long scale might tend to lower the reliability of the instrument, especially when administered to the non-college sample included in this study, the instrument was shortened. This was accomplished by simply eliminating all items which referred to ethnic groups other than blacks and Jews. Thus, the final version administered was thirty-two items in length, requiring less time from both the respondents' point of view as well as that of the various instructors who were asked to participate in this study.

In this study a modification was made of the scoring procedure used by Schuman and Harding. By separating those eight items in which the irrational items indicated bias against blacks, on the one hand, and Jews, on the other, from those eight items in which the irrational items indicated bias in favor of each of those groups, four separate subscales were generated; an Anti-Black scale, a Pro-Black scale, an Anti-Jewish scale and a Pro-Jewish scale. Since each of these scales was treated separately, they were scored using a standard seven-point Likert response mode. In other words, a student who selected the irrational statement and indicated he was very sure in his selection was scored as 7, while those who selected the more rational statement with equal certainty were scored as 1. A no response was scored as 4. This scoring procedure permitted use of the t-test for significance between independent means on each subscale and provided, it was hoped, a more precise view of the changes which had occurred.

#### Authoritarianism

Among the most widely used scales in sociological research is the F scale developed by Adorno, et al. (1). Essentially, the authors view the scale as an attempt to "measure the potentially anti-democratic personality" (1:228). As indicated above, one major criticism of the scale is its ideological limitations, i.e., it seems well suited to measure rightist authoritarianism, but less able to measure the anti-democratic personality whose ideology is leftist. In addition, Lee and Warr note that the original F scale has been widely criticized because of its unidirectional item construction (23).



Lee and Warr's thirty-item F scale is an attempt to overcome this latter limitation of the original scale. From a pool of one hundred statements that were derived from the literature on authoritarianism, they selected fifteen positively and fifteen negatively worded items. Although they do not report a direct correlation coefficient with the original F scale, by correlating their "Balanced F Scale" with selected personality measures they conclude that their version is "statistically at least as good as the original F-scale" (12:128). Test-retest reliability coefficients were .77 and .83 for the positive and negative items, respectively. As is the case for the original F scale, respondents are asked to indicate agreement or disagreement with the items, while scoring is the seven-point Likert system.

#### Summary and Hypotheses

For the purposes of this study a total of five instruments were selected to measure the impact of Introduction to Sociology on students. Two of the scales, the researcher's modification of Brown's Personal Beliefs Inventory (hereafter referred to as the Experimentalism scale) and a shortened version of Schuman and Harding's Prejudice and Rationality scale, were selected because they are closely related to the content of Introduction to Sociology. The Radicalism-Conservatism scale of Comrey and Newmeyer was chosen as a broad measure of the overall impact of general education at Seminole Junior College, of which Introduction to Sociology is a part. These three instruments are more or less representative of the conceptualization of attitudes as having a specific referent.

The two remaining instruments reflect a broader conceptualization of attitudes and are essentially measures of personality. They are the shortened version of Rokeach's Dogmatism scale and the Balanced F Scale of Lee and Warr.

In order to facilitate actual administration of the scales, three were combined into one questionnaire; the Experimentalism scale, the Short Form Dogmatism scale, and the Radicalism-Conservatism scale. Employing the directions and seven-point Likert response mode mentioned above, this combination of scales was used as both a pretest and a posttest during Term 1, September to December, 1973. The Schuman and Harding instrument was used both Terms 111A, April to June, 1973 and 111B, June to August, 1973. Because it was intended to employ the Solomon Four-Group Design during both of these terms, it was decided not to pretest one third of the subjects in each of the three groups with the Prejudice and Rationality scale. Instead, they would be pretested with the Lee and Warr Balanced F Scale. This was accomplished simply by having every third instrument given to students during the pretest the Balanced F Scale. All students were posttested, thus generating the data necessary to measure the possibility of test-retest reactivity during those two seven-week terms.

Having described the five instruments used in this study, the specific hypotheses to be tested are stated below. Following the lead of Plant and Telford, data will be reported taking into account the specific test variables as well as sex. In other words, the hypotheses, stated in null hypothesis form, will be tested for both males and females.

Hypothesis 1: Seminole Junior College students who elect to take the course Introduction to Sociology do not differ on pretest scores significantly from students in the course Western Civilization 11 in Prejudice and Rationality, Experimentalism, Dogmatism, Radicalism-Conservatism and Authoritarianism.

Hypothesis 2: Seminole Junior College students who elect to take the course Introduction to Sociology do not differ on pretest scores significantly from students who attend the institution's Vocational-Technical School and Central Adult High School in Prejudice and Rationality, Experimentalism, Dogmatism, Radicalism-Conservatism and Authoritarianism.

Hypothesis 3: Seminole Junior College students in the course Western Civilization 11 do not differ on pretest scores significantly from students who attend the institution's Vocational-Technical School and Central Adult High School in Prejudice and Rationality, Experimentalism, Dogmatism, Radicalism-Conservatism and Authoritarianism.

Hypothesis 4: Seminole Junior College students who elect to take the course Introduction to Sociology do not change significantly during one term in Prejudice and Rationality, Experimentalism, Dogmatism and Radicalism-Conservatism.

Hypothesis 5: Seminole Junior College students in the course Western Civilization 11 do not change significantly during one term in Prejudice and Rationality, Experimentalism, Dogmatism and Radicalism-Conservatism.

Hypothesis 6: Students who attend Seminole Junior College's Vocational-Technical School and Central Adult High School do not

change significantly during one term in Prejudice and Rationality, Experimentalism, Dogmatism and Radicalism-Conservatism.

Hypothesis 7: Seminole Junior College students who elect to take the course Introduction to Sociology do not differ on posttest scores significantly from students in the course Western Civilization 11 in Prejudice and Rationality, Experimentalism, Dogmatism and Radicalism-Conservatism.

Hypothesis 8: Seminole Junior College students who elect to take the course Introduction to Sociology do not differ on posttest scores significantly from students who attend the institution's Vocational-Technical School and Central Adult High School in Prejudice and Rationality, Experimentalism, Dogmatism and Radicalism-Conservatism.

Hypothesis 9: Seminole Junior College students in the course Western Civilization 11 do not differ on posttest scores significantly from students who attend the institution's Vocational-Technical School and Central Adult High School in Prejudice and Rationality, Experimentalism, Dogmatism and Radicalism-Conservatism.

Each of these hypotheses was tested using the "t-Test for a Difference Between Two Independent Means" (13:9-12). In each instance a F-test was performed for the groups whose scores were being compared (13:107-08). When a variance was found significant, the "Pooled Variance Formula" was utilized in place of the t-test.\* In all cases, significance was taken to exist at a probability of .05 or less.

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\*Class handout "Selecting the t Model and Degrees of Freedom," EDF-360, Elementary Statistical Methods in Education, University of Florida, Summer Quarter (1971).

## CHAPTER 1V

### RESULTS

#### Design Modifications

Several unanticipated difficulties arose during Terms 111A and 111B in which the Prejudice and Rationality scale was administered. Although the initial pretest during Term 111A in Introduction to Sociology and Western Civilization 11 went as planned, the non-college comparison group, composed of students in the Central Adult High School and Vocational-Technical School, presented an immediate problem. Due to different scheduling and off-campus, on-the-job training requirements, the pretest for this group was delayed for three weeks. It was hoped that this, by itself, would not seriously hamper the use of the non-college group since a second scale administration seven weeks later would have at least resulted in data over a period equivalent to that of the first two groups.

Upon scoring the now delayed pretest of the non-college group, it became obvious that members of this group were reacting strongly and negatively to the instrument itself. Subjects responding to the instrument are requested to select the more correct choice in each pair of statements and indicate the degree of certainty with which the choice was made. Other than background characteristics, age, sex, and initials of mother's maiden name, no other information is solicited

by the scale. Nine subjects, however, felt obligated to make comments about the instruments. One fifty-two year old male, who did not indicate his race, wrote:

For lack of a better word I must say that this questionnaire is a waste of time and in general a 'crock of shit' and an insult to the average person's intelligence. I fail to see the point and I feel like a damn fool filling it out.  
Do me a favor and shove it!!!!

A nineteen year old white female wrote:

I feel your questions are not fair for a jew or black person taking this. This test is directed toward the white race. You say nothing against the white people for a black or jew to decide. So your survey is irrelevant unless only prejudiced white people are going to be getting the result. In my judgment [sic] your survey is BAD weather [sic] you asked for it or not.

In addition, two black females under age twenty-five returned the scale to their instructor, refusing to complete it, while a third black female completed only the first two of seven pages and returned the instrument. Because of these reactions, which contrasted sharply with the two college groups where nothing similar occurred, it was decided that a posttest, seven weeks later, would serve no useful purpose.

During Term 1 the instrument combining the Experimentalism, Dogmatism and Radicalism-Conservatism scales was administered as a pretest and posttest to the sociology and history students. The non-college comparison group once again produced difficulties. Vocational-Technical School students were not included in the Term 1 non-college group because most were continuing their studies from Terms 111A and 111B, when they had responded to the Prejudice and

and Rationality scale. It was believed that the administration of another attitude scale might produce similar negative reactions. Moreover, off-campus and on-the-job training would have delayed the administration of the pretest by more than two weeks. Thus only Central Adult High School students were used for the pretest, with a corresponding drop in mean and modal age as indicated in Table 8.

In addition, posttesting these students proved impossible. Apparently operating under a demanding time schedule, instructors were unable to posttest those same students before the term ended in December. Since student turnover from term to term is high in the Central Adult High School, a posttest in January seemed without utility when the next term would have begun.

Another difficulty arose from the attempt at the conclusion of Term 111A to measure test-retest reactivity as part of the Solomon Four-Group Design. For both Introduction to Sociology and Western Civilization 11 the number of females who could be positively identified as having either been pretested and posttested or posttested only was too low for computational usefulness. For sociology females N for posttested was three, while for pretested and posttested it was sixteen. In the case of the history females N's were one and five respectively.

For males in both groups N's were sufficient to compute a t-test for test-retest reactivity. For male history students the following values were computed:

Table 1

Prejudice and Rationality Subscales:  
 Test-Retest Reactivity  
 Male History Students, Term 111A

|                            | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=7, Mean  | 26.00             | 27.43            | 32.43              | 25.14             |
| SD                         | 8.96              | 10.42            | 12.30              | 9.63              |
| Posttest only<br>N=5, Mean | 24.60             | 29.40            | 28.00              | 30.60             |
| SD                         | 10.76             | 10.26            | 9.80               | 6.52              |
| t                          | .25               | .33              | .07                | 1.09              |
| P                          | NS                | NS               | NS                 | NS                |

Since none of the t - values indicated significant differences between those who had been pretested and those who had not, it was concluded that test-retest reactivity had not occurred. Thus it was decided to administer the Prejudice and Rationality scale and the Authoritarianism scale to the history students in Term 111B according to the original design of the study, i.e., one-third would receive the Authoritarianism scale and two-thirds the Prejudice and Rationality scale.

For male sociology students the following values were computed:

Table 2

Prejudice and Rationality Subscales:  
 Test-Retest Reactivity  
 Male Sociology Students, Term 111A

|                            | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=12, Mean | 21.08             | 28.83            | 22.75              | 29.67             |



Table 2 - continued

|                             | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-----------------------------|-------------------|------------------|--------------------|-------------------|
| SD                          | 10.49             | 7.89             | 4.92               | 9.97              |
| Posttest only<br>N=11, Mean | 23.36             | 34.64            | 24.09              | 30.46             |
| SD                          | 6.75              | 5.47             | 6.98               | 8.69              |
| t                           | .62               | 2.04             | .54                | .20               |
| P                           | NS                | NS               | NS                 | NS                |

Although none of the computed  $t$  - values for this group reached the .05 level of significance, on the Pro-Black subscale the difference did approach this level and was significant at the .10 level. Moreover, each of the mean scores on the four subscales was higher for the posttested only group. For this reason, and because of the negative responses of the non-college group to the Prejudice and Rationality scale, it was decided that the possibility of test-retest reactivity in the sociology classes did exist. Because, however, the evidence that reactivity was occurring was slim, it was decided not eliminate the pretest entirely. Instead, only one-third of the sociology students were given this scale as a pretest during Term 111B while the remainder were asked to respond to the Authoritarianism scale. By using this technique it was hoped to generate additional data for males, as well as females, to use in determining the existence, or non-existence, of test-retest reactivity. Tables 3 and 4 below reflect the data generated in this fashion and include scores from students in both Terms 111A and 111B.

Table 3

Prejudice and Rationality Subscales:  
 Test-Retest Reactivity  
 Male Sociology Students, Terms 111A and 111B

|                             | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=18, Mean  | 21.00             | 30.28            | 24.78              | 30.44             |
| SD                          | 9.47              | 8.71             | 6.86               | 8.36              |
| Posttest only<br>N=25, Mean | 22.96             | 33.12            | 23.84              | 29.96             |
| SD                          | 6.68              | 6.72             | 8.48               | 7.88              |
| t                           | .79               | 1.20             | .04                | .19               |
| P                           | NS                | NS               | NS                 | NS                |

Table 4

Prejudice and Rationality Subscales:  
 Test-Retest Reactivity  
 Female Sociology Students, Terms 111A and 111B

|                             | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=20, Mean  | 22.05             | 32.20            | 28.10              | 33.35             |
| SD                          | 5.26              | 7.12             | 7.09               | 10.39             |
| Posttest only<br>N=12, Mean | 22.08             | 31.00            | 24.08              | 29.33             |
| SD                          | 5.74              | 8.51             | 6.05               | 11.88             |
| t                           | .02               | .43              | 1.64               | 1.01              |
| P                           | NS                | NS               | NS                 | NS                |

No significant differences were found between the pretested groups of males and females and the posttested only groups. Test-retest reactivity, then, did not occur in the Introduction to Sociology classes and all pretest and posttest data were used in the calculations made below for sociology classes.

Tables 5 and 6 contain similar information concerning male and female Western Civilization 11 students. As was the case in the sociology classes, these students did not appear to react to the Prejudice and Rationality scale. No significant differences were found on any of the four subscales for either sex, hence the calculations made below used all pretest and posttest data from the history classes.

Table 5

Prejudice and Rationality Subscales:  
Test-Retest Reactivity  
Male History Students, Terms 111A and 111B

|                            | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=8, Mean  | 21.38             | 30.13            | 30.88              | 23.00             |
| SD                         | 10.47             | 11.21            | 11.63              | 9.38              |
| Posttest only<br>N=8, Mean | 27.50             | 31.50            | 26.88              | 30.13             |
| SD                         | 9.84              | 10.77            | 9.13               | 6.67              |
| t                          | 1.20              | .25              | .76                | 1.75              |
| P                          | NS                | NS               | NS                 | NS                |

Table 6

Prejudice and Rationality Subscales:  
 Test-Retest Reactivity  
 Female History Students, Terms 111A and 111B

|                            | <u>Anti-<br/>Black</u> | <u>Pro-<br/>Black</u> | <u>Anti-<br/>Jewish</u> | <u>Pro-<br/>Jewish</u> |
|----------------------------|------------------------|-----------------------|-------------------------|------------------------|
| Pre/Posttest<br>N=8, Mean  | 14.88                  | 37.88                 | 21.25                   | 43.38                  |
| SD                         | 5.54                   | 5.25                  | 6.22                    | 6.76                   |
| Posttest only<br>N=4, Mean | 20.50                  | 34.75                 | 20.75                   | 42.25                  |
| SD                         | 11.03                  | 10.82                 | 3.79                    | 7.00                   |
| t                          | 1.20                   | .69                   | .14                     | .27                    |
| P                          | NS                     | NS                    | NS                      | NS                     |

One other condition which occurred during the short Terms 111A and 111B was the relatively low N's in the history classes. In part this was caused simply by an unanticipated low enrollment in the Western Civilization 11 classes. A high withdrawal rate also characterized these particular sections. Finally, those students in the history classes who indicated on their questionnaire that they had previously taken a sociology course at Seminole Junior College were eliminated for calculation purposes. As will be demonstrated below, the withdrawal rate did influence the calculations which were made for the purpose of this study.

One additional aspect of the design should be reported. The original design called for a non-college comparison group matched as closely as possible with both college groups on the basis of sex, race

and age. As Tables 7 and 8 indicate, the criteria were satisfactorily met. In addition, the sociology classes were matched as closely as possible in terms of the periods during each term in which they were offered with the history classes which served as the college comparison group. As it turned out, this meant that two day classes and one evening class from both Terms 111A and 111B for both groups were the source of data for the Prejudice and Rationality and Authoritarianism scales. During Term 1, four day classes and one evening class were used.

Table 7  
Sex and Age Comparisons:  
Terms 111A and 111B Pretest Groups

|                        | N  | Range | Mean | Mode | No. Black |
|------------------------|----|-------|------|------|-----------|
| Sociology<br>Males     | 62 | 16-47 | 25   | 19   | 4         |
| History<br>Males       | 52 | 17-44 | 22   | 19   | 3         |
| Non-College<br>Males   | 44 | 16-52 | 19   | 18   | 8         |
| Sociology<br>Females   | 57 | 16-57 | 24   | 18   | 8         |
| History<br>Females     | 26 | 16-47 | 20   | 19   | 2         |
| Non-College<br>Females | 60 | 16-53 | 18   | 17   | 12        |

Table 8

Sex and Age Comparisons:  
Term 1 Pretest Groups

|                     | N  | Range | Mean | Mode | No. Black |
|---------------------|----|-------|------|------|-----------|
| Sociology Males     | 79 | 17-58 | 23   | 19   | 9         |
| History Males       | 56 | 16-53 | 22   | 19   | 2         |
| Non-College Males   | 33 | 16-24 | 17   | 17   | 3         |
| Sociology Females   | 55 | 16-47 | 20   | 18   | 6         |
| History Females     | 26 | 17-44 | 20   | 18   | 2         |
| Non-College Females | 34 | 16-18 | 17   | 17   | 0         |

#### Authoritarianism and Prejudice and Rationality

It will be recalled that Hypotheses 1, 2 and 3 state that using pretest scores sociology, history, and the non-college comparison groups do not differ significantly on any of the scales employed in this study. Tables 9 through 15 present data generated by the Authoritarianism scale and the Prejudice and Rationality scale which test those hypotheses.

Table 9  
Authoritarianism:  
Sociology and History Students

| <u>Males</u>        | <u>Females</u>      |
|---------------------|---------------------|
| Sociology<br>N = 33 | Sociology<br>N = 28 |

Table 9 - continued

| <u>Males</u>      |        | <u>Females</u>    |        |
|-------------------|--------|-------------------|--------|
| Mean              | 111.94 | Mean              | 118.04 |
| SD                | 17.37  | SD                | 15.80  |
| History<br>N = 24 |        | History<br>N = 11 |        |
| Mean              | 108.88 | Mean              | 113.55 |
| SD                | 13.41  | SD                | 11.91  |
| t                 | .72    | t                 | .85    |
| P                 | NS     | P                 | NS     |

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Because of the initial reactions of the non-college group to the Prejudice and Rationality scale, it was decided to dispense with the Balanced F-Scale for those subjects. The above table does indicate, however, that at least as measured by the Authoritarianism scale, students who elected to take Introduction to Sociology did not differ significantly from the student body as represented in the Western Civilization 11 classes during Terms 111A and 111B.

Tables 10, 11 and 12 present a further test of Hypotheses 1, 2 and 3 for males in sociology, history and the non-college group. As these tables indicate, the only significant difference, at the .01 level, was between the sociology males and the non-college males on the Anti-Black subscale. Since high mean scores on any of the subscales indicates high irrationality, the non-college males were significantly less rational toward blacks than the sociology males and that lack of rationality was expressed against blacks.

Table 10

Prejudice and Rationality Subscales:  
Sociology and History Males; Pretest

|                         | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-------------------------|-------------------|------------------|--------------------|-------------------|
| Sociology<br>N=29, Mean | 21.93             | 30.55            | 24.97              | 32.34             |
| SD                      | 5.76              | 7.48             | 5.95               | 6.57              |
| History<br>N=28, Mean   | 24.00             | 29.36            | 27.86              | 30.00             |
| SD                      | 8.70              | 7.28             | 8.74               | 7.39              |
| t                       | 1.06              | .61              | 1.46               | 1.27              |
| P                       | NS                | NS               | NS                 | NS                |

Table 11

Prejudice and Rationality Subscales:  
Sociology and Non-College Males; Pretest

|                           | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|---------------------------|-------------------|------------------|--------------------|-------------------|
| Sociology<br>N=29, Mean   | 21.93             | 30.55            | 24.97              | 32.34             |
| SD                        | 5.76              | 7.48             | 5.95               | 6.57              |
| Non-College<br>N=44, Mean | 28.11             | 29.59            | 27.64              | 31.77             |
| SD                        | 10.34             | 8.77             | 9.54               | 8.04              |
| t                         | 3.07*             | .48              | 1.48*              | .32               |
| P                         | .01               | NS               | NS                 | NS                |

\*Pooled Variance Formula employed



Table 12

Prejudice and Rationality Subscales:  
History and Non-College Males; Pretest

|                           | <u>Anti-<br/>Black</u> | <u>Pro-<br/>Black</u> | <u>Anti-<br/>Jewish</u> | <u>Pro-<br/>Jewish</u> |
|---------------------------|------------------------|-----------------------|-------------------------|------------------------|
| History<br>N=28           | 24.00                  | 29.36                 | 27.86                   | 30.00                  |
| SD                        | 8.70                   | 7.28                  | 8.74                    | 7.39                   |
| Non-College<br>N=44, Mean | 28.11                  | 29.59                 | 27.64                   | 31.77                  |
| SD                        | 10.34                  | 8.77                  | 9.54                    | 8.04                   |
| t                         | 1.73                   | .12                   | .10                     | .94                    |
| P                         | NS                     | NS                    | NS                      | NS                     |

Tables 13, 14 and 15 present data testing Hypotheses 1, 2 and 3 for females in the three groups. In each instance the null hypothesis may not be rejected; none of the groups differed significantly from the others on the four subscales of the Prejudice and Rationality instrument.

Table 13

Prejudice and Rationality Subscales:  
Sociology and History Females; Pretest

|                         | <u>Anti-<br/>Black</u> | <u>Pro-<br/>Black</u> | <u>Anti-<br/>Jewish</u> | <u>Pro-<br/>Jewish</u> |
|-------------------------|------------------------|-----------------------|-------------------------|------------------------|
| Sociology<br>N=29, Mean | 23.38                  | 29.97                 | 26.79                   | 33.24                  |
| SD                      | 7.98                   | 7.88                  | 8.20                    | 8.55                   |
| History<br>N=15, Mean   | 20.07                  | 31.40                 | 25.67                   | 38.13                  |

Table 13 - continued

|    | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----|-------------------|------------------|--------------------|-------------------|
| SD | 6.61              | 6.34             | 8.96               | 6.12              |
| t  | 1.29              | .61              | .42                | 1.96              |
| P  | NS                | NS               | NS                 | NS                |

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Table 14

Prejudice and Rationality Subscales:  
Sociology and Non-College Females; Pretest

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|                           | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|---------------------------|-------------------|------------------|--------------------|-------------------|
| Sociology<br>N=29, Mean   | 23.38             | 29.97            | 26.79              | 33.24             |
| SD                        | 7.98              | 7.88             | 8.20               | 8.55              |
| Non-College<br>N=60, Mean | 20.98             | 32.74            | 27.02              | 34.78             |
| SD                        | 7.33              | 7.87             | 6.77               | 6.52              |
| t                         | 1.35              | 1.40             | .14                | 1.54              |
| P                         | NS                | NS               | NS                 | NS                |

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Table 15

Prejudice and Rationality Subscales:  
History and Non-College Females; Pretest

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|                       | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-----------------------|-------------------|------------------|--------------------|-------------------|
| History<br>N=15, Mean | 20.07             | 31.40            | 25.67              | 38.13             |

Table 15 - continued

|                           | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|---------------------------|-------------------|------------------|--------------------|-------------------|
| SD                        | 6.61              | 6.34             | 8.96               | 6.12              |
| Non-College<br>N=60, Mean | 20.98             | 32.74            | 27.02              | 34.78             |
| SD                        | 7.33              | 7.87             | 6.77               | 6.52              |
| t                         | .44               | .49              | .64                | 1.79              |
| P                         | NS                | NS               | NS                 | NS                |

The effects of the courses Introduction to Sociology and Western Civilization 11 are indicated below in Tables 16 and 17, respectively. As Table 16 indicates, Introduction to Sociology had no measurable effect on either males or females. Thus, insofar as the Prejudice and Rationality scale is concerned, Hypothesis 4 cannot be rejected.

Table 16

Prejudice and Rationality Subscales:  
Sociology Students; Pretest and Posttest

| <u>Males</u>           | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|------------------------|-------------------|------------------|--------------------|-------------------|
| Pretest<br>N=29, Mean  | 21.93             | 30.55            | 24.97              | 32.34             |
| SD                     | 5.76              | 7.48             | 5.95               | 6.57              |
| Posttest<br>N=51, Mean | 21.41             | 32.22            | 25.08              | 30.02             |
| SD                     | 7.57              | 7.81             | 6.94               | 8.17              |
| t                      | .32               | .93              | .07                | 1.31              |
| P                      | NS                | NS               | NS                 | NS                |

Table 16 - continued

| <u>Females</u>         | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|------------------------|-------------------|------------------|--------------------|-------------------|
| Pretest<br>N=29, Mean  | 23.38             | 29.97            | 26.79              | 33.24             |
| SD                     | 7.98              | 7.88             | 8.20               | 8.55              |
| Posttest<br>N=51, Mean | 21.63             | 32.02            | 27.53              | 31.41             |
| SD                     | 7.10              | 7.73             | 7.23               | 10.01             |
| t                      | .95               | 1.13             | .42                | 1.08              |
| P                      | NS                | NS               | NS                 | NS                |

In the case of the Western Civilization 11 males and females, the results of the posttest are more complex. For males, there was apparently no change. For females, on the other hand, significant changes were recorded on three of the subscales; Pro-Black, Anti-Jewish and Pro-Jewish. On the two Pro subscales, the difference represents an increase in bias in favor of the ethnic group, while on the Anti-Jewish subscale, the difference represents a significant loss of bias against Jews.

Table 17

Prejudice and Rationality Subscales;  
History Students; Pretest and Posttest

| <u>Males</u>          | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-----------------------|-------------------|------------------|--------------------|-------------------|
| Pretest<br>N=28, Mean | 24.00             | 29.36            | 27.86              | 30.00             |

Table 17 - continued

| <u>Males</u>           | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|------------------------|-------------------|------------------|--------------------|-------------------|
| SD                     | 8.70              | 7.28             | 8.74               | 7.39              |
| Posttest<br>N=24, Mean | 23.75             | 30.88            | 27.04              | 28.08             |
| SD                     | 10.19             | 8.58             | 9.09               | 8.76              |
| t                      | .10               | .69              | .33                | .86               |
| P                      | NS                | NS               | NS                 | NS                |
| <u>Females</u>         |                   |                  |                    |                   |
| Pretest<br>N=15, Mean  | 20.07             | 31.40            | 25.67              | 38.13             |
| SD                     | 6.61              | 6.34             | 8.96               | 6.12              |
| Posttest<br>N=16, Mean | 16.38             | 37.88            | 19.88              | 43.00             |
| SD                     | 6.86              | 6.62             | 5.76               | 6.75              |
| t                      | 1.52              | 2.77             | 2.14               | 2.09              |
| P                      | NS                | .01              | .05                | .05               |

Such results, to say the least, were found surprising. They seem to indicate that while Introduction to Sociology had virtually no impact on female students, Western Civilization 11 did. Further analysis, therefore, seemed called for. As indicated above, twenty-six females were pretested on the Prejudice and Rationality or Authoritarianism scales. A total of sixteen females took the Prejudice and Rationality posttest representing a total loss of ten, or more than one third.

Using the coding procedure employed throughout this study, i.e.,

having students indicate the first and last initials of their mother's maiden name, it was possible to identify eight females who were both pretested and posttested. Since these eight were not specifically chosen out of the pretest total of twenty-six, it may be assumed that they are representative of the total fifteen who were pretested using the Prejudice and Rationality instrument. Table 18 compares the pretest and posttest scores of those eight females.

Table 18

Prejudice and Rationality Subscales:  
Selected History Females; Pretest and Posttest

|                       | <u>Anti-<br/>Black</u> | <u>Pro-<br/>Black</u> | <u>Anti-<br/>Jewish</u> | <u>Pro-<br/>Jewish</u> |
|-----------------------|------------------------|-----------------------|-------------------------|------------------------|
| Pretest<br>N=8, Mean  | 17.38                  | 34.50                 | 24.83                   | 38.63                  |
| SD                    | 4.00                   | 5.83                  | 7.09                    | 4.24                   |
| Posttest<br>N=8, Mean | 14.88                  | 37.88                 | 21.25                   | 43.38                  |
| SD                    | 5.54                   | 5.25                  | 6.22                    | 6.76                   |
| t                     | 1.03                   | 1.22                  | .94                     | 1.68                   |
| P                     | NS                     | NS                    | NS                      | NS                     |

For these eight students, no significant changes resulted from the course Western Civilization 11. The next question is whether or not these eight are representative of the total sixteen females who did, in fact, complete the course. More precisely, do the posttest scores of the eight females who were definitely pretested differ from the

eight for whom pretest scores are unavailable? Table 19 presents the relevant data.

Table 19

Prejudice and Rationality Subscales:  
Pretested and Not Pretested History Females; Posttest

|                         | <u>Anti-<br/>Black</u> | <u>Pro-<br/>Black</u> | <u>Anti-<br/>Jewish</u> | <u>Pro-<br/>Jewish</u> |
|-------------------------|------------------------|-----------------------|-------------------------|------------------------|
| No Pretest<br>N=8, Mean | 17.88                  | 37.88                 | 18.50                   | 42.63                  |
| SD                      | 8.06                   | 8.15                  | 5.29                    | 7.27                   |
| Pretested<br>N=8, Mean  | 14.88                  | 37.88                 | 21.25                   | 43.38                  |
| SD                      | 5.54                   | 5.25                  | 6.22                    | 6.76                   |
| t                       | .87                    | 0                     | .95                     | .95                    |
| P                       | NS                     | NS                    | NS                      | NS                     |

Since no differences exist between these two groups it may be concluded that the group of eight who were pretested and posttested is representative of all females who did complete the course. The next question has to do with those females who did not complete the posttest. While absences from class may account for some of them, it seems more likely that many of those females had withdrawn from the course. Indeed, for males a high withdrawal rate seems to have characterized Western Civilization 11 during Terms 111A and 111B. From an initial total of fifty-two males only twenty-four were available for the posttest.

As a means of measuring the effect of this relatively high withdrawal/absence rate on the posttest, those eight females who completed the course were compared, on pretest scores, with the seven other pretested females who could not positively be identified on the posttest. Table 20 presents that comparison.

Table 20

Prejudice and Rationality Subscales:  
Posttested and Not Posttested History Females; Pretest

|                          | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|--------------------------|-------------------|------------------|--------------------|-------------------|
| Posttest<br>N=8, Mean    | 17.38             | 34.50            | 24.38              | 38.63             |
| SD                       | 4.00              | 5.83             | 7.09               | 4.24              |
| No Posttest<br>N=7, Mean | 23.14             | 27.86            | 27.14              | 37.57             |
| SD                       | 7.92              | 5.15             | 11.14              | 8.10              |
| t                        | 1.73              | 2.32             | .58                | .32               |
| P                        | NS                | .05              | NS                 | NS                |

On the Pro-Black subscale a significant difference, at the .05 level, did exist between these two groups. Although no differences exist on the other subscales, it is here argued that since ten of the initial pretested female history students did not take the posttest, and probably withdrew from the course, that the apparent changes that resulted from Western Civilization 11 are illusory. What in fact seems to have occurred in the Western Civilization 11 classes is that a relatively high withdrawal rate produced the recorded differences on



the subscales. In effect, then, those females who completed Western Civilization 11 differed on the three subscales indicated on Table 17 from those who began the course, but did not themselves change as a result of taking the course Western Civilization 11. Thus, insofar as Prejudice and Rationality is concerned, Hypothesis 5 cannot be rejected for female students in the history classes. Nor can it be rejected for male students, as Table 17 indicates.

Since a posttest was not administered to the non-college students, Hypotheses 8 and 9, which concern posttest comparisons between the two college groups and the non-college students, could not be tested. Hypothesis 7, comparing posttest scores of the sociology and history students, could not be tested for females since, as argued above, the high withdrawal/absence rate distorted the posttest scores of the history females. Sociology and history males, on the other hand, could be compared on posttest scores. As Table 21 indicates, Hypothesis 7 for those males cannot be rejected.

Table 21

Prejudice and Rationality Subscales:  
Sociology and History Males; Posttest

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|                         | <u>Anti-<br/>Black</u> | <u>Pro-<br/>Black</u> | <u>Anti-<br/>Jewish</u> | <u>Pro-<br/>Jewish</u> |
|-------------------------|------------------------|-----------------------|-------------------------|------------------------|
| Sociology<br>N=51, Mean | 21.41                  | 32.22                 | 25.08                   | 30.02                  |
| SD                      | 7.57                   | 7.81                  | 6.94                    | 8.17                   |

---

Table 21 - continued

|                       | <u>Anti-<br/>Black</u> | <u>Pro-<br/>Black</u> | <u>Anti-<br/>Jewish</u> | <u>Pro-<br/>Jewish</u> |
|-----------------------|------------------------|-----------------------|-------------------------|------------------------|
| History<br>N=24, Mean | 23.75                  | 30.88                 | 27.04                   | 28.08                  |
| SD                    | 10.19                  | 8.58                  | 9.09                    | 8.76                   |
| t                     | 1.11                   | .67                   | 1.08                    | .93                    |
| P                     | NS                     | NS                    | NS                      | NS                     |

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Experimentalism

Table 22 presents data generated by the pretest of the researcher's modification of Brown's Personal Beliefs Inventory with high scores indicating greater agreement with the philosophy of Experimentalism as here measured. T-tests were computed for each of the three groups divided according to sex. As Table 22 indicates, there were no significant differences between any of the groups. Thus, Hypotheses 1, 2 and 3 for this scale may not be rejected.

Nor may Hypotheses 4 or 5 be rejected. As Table 23 shows, neither sociology nor history students changed significantly during the term studied when pretest and posttest scores are compared. Finally, posttest comparisons between the same categories of students, as presented in Table 24, failed to demonstrate any significant differences. Therefore, Hypothesis 7 may not be rejected.

Table 22  
Experimentalism:  
Sociology, History and Non-College Students: Pretest

| Males                             |                 |                   |
|-----------------------------------|-----------------|-------------------|
| Sociology, N=79                   | History, N=56   | Non-College, N=33 |
| Mean 86.08                        | Mean 84.66      | Mean 81.97        |
| SD 13.46                          | SD 12.49        | SD 8.98           |
| Non-College, N=33                 | Sociology, N=79 | History, N=56     |
| Mean 81.97                        | Mean 86.08      | Mean 84.66        |
| SD 8.98                           | SD 13.46        | SD 12.49          |
| t 1.89*                           | t .63           | t 1.17*           |
| P NS                              | P NS            | P NS              |
| Females                           |                 |                   |
| Sociology, N=55                   | History, N=26   | Non-College, N=34 |
| Mean 85.96                        | Mean 82.12      | Mean 84.68        |
| SD 12.69                          | SD 10.52        | SD 12.20          |
| Non-College, N=34                 | Sociology, N=55 | History, N=26     |
| Mean 84.68                        | Mean 85.96      | Mean 82.12        |
| SD 12.20                          | SD 12.69        | SD 10.52          |
| t .46                             | t 1.30          | t .84             |
| P NS                              | P NS            | P NS              |
| *Pooled Variance Formula Employed |                 |                   |

Table 23

Experimentalism:  
Sociology and History Students; Pretest and Posttest

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| <u>Sociology Males</u><br>Pretest, N=79   |       | <u>Sociology Females</u><br>Pretest, N=55   |       |
|---|-------|---|-------|
| Mean                                      | 86.08 | Mean  | 85.96 |
| SD  | 13.46 | SD  | 12.69 |
| Posttest, N=67                            |       | Posttest, N=52                              |       |
| Mean                                      | 85.76 | Mean  | 85.60 |
| SD  | 13.01 | SD  | 14.12 |
| t   | .17   | t   | .13   |
| P   | NS    | P   | NS    |
| <br><u>History Males</u><br>Pretest, N=56 |       | <br><u>History Females</u><br>Pretest, N=26 |       |
| Mean                                      | 84.66 | Mean  | 82.12 |
| SD  | 12.49 | SD  | 10.52 |
| Posttest, N=39                            |       | Posttest, N=17                              |       |
| Mean                                      | 84.13 | Mean  | 83.94 |
| SD  | 12.11 | SD  | 12.09 |
| t   | .19   | t   | .19   |
| P   | NS    | P   | NS    |

---

Table 24

Experimentalism:  
Sociology and History Students; Posttest

| <u>Males</u>    |       | <u>Females</u>  |       |
|-----------------|-------|-----------------|-------|
| Sociology, N=67 |       | Sociology, N=52 |       |
| Mean            | 85.76 | Mean            | 85.60 |
| SD              | 13.01 | SD              | 14.12 |
| History, N=39   |       | History, N=17   |       |
| Mean            | 84.13 | Mean            | 83.94 |
| SD              | 12.11 | SD              | 12.09 |
| t               | .64   | t               | .43   |
| P               | NS    | P               | NS    |

#### Dogmatism

Table 25 presents data to determine whether the three examined groups, divided according to sex, differed on the pretest of the Dogmatism scale. Since the scale is unidirectional and agreement with the items is taken to demonstrate dogmatism, high scores indicate greater dogmatism. As shown, the only differences found were between the non-college males and both groups of college males, with both differences significant at the .01 confidence level.

The differences may be due to college attendance, which presumably produces openmindedness. At the same time, the lower mean and modal ages of the non-college males may have been the source of the differences. The Plant and Telford study mentioned earlier would lend support to this

latter view (29). As they noted, decreases in dogmatism seemed more clearly related to increasing age than to community college attendance. In terms of the stated hypotheses of this study, Hypotheses 2 and 3 for males are rejected insofar as the Dogmatism scale is concerned, i.e., both groups of college males are significantly less dogmatic than the non-college students. Hypothesis 1, on the other hand, may not be rejected, i.e., sociology and history males did not differ significantly on the Dogmatism scale. For females, Hypotheses 1,2, and 3 may not be rejected.

The remaining null hypotheses may not be rejected. As Tables 26 and 27 demonstrate, the sociology and history students did not change during the term under study and there were no posttest differences between them.

Table 25

Dogmatism:  
Sociology, History and Non-College Students; Pretest

| Males             |       |                 |       |                   |       |
|-------------------|-------|-----------------|-------|-------------------|-------|
| Sociology, N=79   |       | History, N=56   |       | Non-College, N=33 |       |
| Mean              | 71.97 | Mean            | 69.59 | Mean              | 80.58 |
| SD                | 15.50 | SD              | 16.96 | SD                | 17.19 |
| Non-College, N=33 |       | Sociology, N=79 |       | History, N=56     |       |
| Mean              | 80.58 | Mean            | 71.97 | Mean              | 69.59 |
| SD                | 17.19 | SD              | 15.50 | SD                | 16.96 |
| t                 | 2.69  | t               | .85   | t                 | 2.88  |
| P                 | .01   | P               | NS    | P                 | .01   |

Table 25 - continued

| Females           |       |                 |       |                   |       |
|-------------------|-------|-----------------|-------|-------------------|-------|
| Sociology, N=54   |       | History, N=26   |       | Non-College, N=34 |       |
| Mean              | 68.52 | Mean            | 69.81 | Mean              | 71.85 |
| SD                | 18.28 | SD              | 15.69 | SD                | 16.57 |
| Non-College, N=34 |       | Sociology, N=54 |       | History, N=26     |       |
| Mean              | 71.85 | Mean            | 68.52 | Mean              | 69.81 |
| SD                | 16.57 | SD              | 18.28 | SD                | 15.69 |
| t                 | .84   | t               | .30   | t                 | .48   |
| P                 | NS    | P               | NS    | P                 | NS    |

Table 26

Dogmatism:  
Sociology and History Students; Pretest and Posttest

| <u>Sociology Males</u><br>Pretest, N=79 |       | <u>Sociology Females</u><br>Pretest, N=54 |       |
|---|-------|---|-------|
| Mean                                    | 71.97 | Mean                                      | 68.52 |
| SD                                      | 15.50 | SD  | 18.28 |
| Posttest, N=67                          |       | Posttest, N=52                            |       |
| Mean                                    | 70.78 | Mean                                      | 68.87 |
| SD                                      | 19.95 | SD  | 18.36 |
| t                                       | .48   | t   | .10   |
| P                                       | NS    | P   | NS    |
| <u>History Males</u><br>Pretest, N=56   |       | <u>History Females</u><br>Pretest, N=26   |       |
| Mean                                    | 69.59 | Mean                                      | 69.81 |

Table 26 - continued

| <u>History Males</u> |       | <u>History Females</u> |       |
|----------------------|-------|------------------------|-------|
| SD                   | 16.96 | SD                     | 15.69 |
| Posttest, N=39       |       | Posttest, N=17         |       |
| Mean                 | 71.36 | Mean                   | 66.47 |
| SD                   | 17.37 | SD                     | 15.82 |
| t                    | .46   | t                      | .67   |
| P                    | NS    | P                      | NS    |

Table 27

Dogmatism:  
Sociology and History Students; Posttest

| <u>Males</u>    |       | <u>Females</u>  |       |
|-----------------|-------|-----------------|-------|
| Sociology, N=67 |       | Sociology, N=52 |       |
| Mean            | 70.78 | Mean            | 68.87 |
| SD              | 19.95 | SD              | 18.36 |
| History, N=39   |       | History, N=17   |       |
| Mean            | 71.36 | Mean            | 66.47 |
| SD              | 17.37 | SD              | 15.82 |
| t               | .64   | t               | .48   |
| P               | NS    | P               | NS    |

#### Radicalism-Conservatism

On the Radicalism-Conservatism scale significant pretest differences existed. As Table 28 indicates, history males and



females differed significantly from their non-college counterparts at the .05 and .01 confidence levels, respectively. Since high scores on this scale indicate conservatism, the data demonstrates that the non-college students were less conservative than the history students. It will be recalled that the history students in this study represented a broad sample of the students at Seminole Junior College. To the extent that Seminole Junior College is typical of other community colleges, it may be argued that such students tend to be of lower-middle and working class origin, many of whom hope to use education to achieve social mobility. These students may basically accept the social system in which they live and wish not to change it, but rather to move upwards within it. The high school students may simply not be as committed to that social system. Age, too, may partially explain the observed differences. Perhaps the older students in the history classes are more integrated into their social system than the younger high school students.

Similar to the results of the Experimentalism and Dogmatism scales, the remaining null hypotheses concerning change during the term cannot be rejected. Tables 29 and 30 show that the groups did not change as a result of either course and did not differ from one another on posttest scores.

Table 28  
Radicalism-Conservatism  
Sociology, History and Non-College Students; Pretest

| Males           |               |                   |
|-----------------|---------------|-------------------|
| Sociology, N=78 | History, N=55 | Non-College, N=34 |
| Mean 121.55     | Mean 123.75   | Mean 115.94       |

Table 28 - continued

## Males

|                   |        |                 |        |                   |        |
|-------------------|--------|-----------------|--------|-------------------|--------|
| Sociology, N=78   |        | History, N=55   |        | Non-College, N=34 |        |
| SD                | 20.05  | SD              | 22.16  | SD                | 13.47  |
| Non-College, N=34 |        | Sociology, N=78 |        | History, N=55     |        |
| Mean              | 115.94 | Mean            | 121.55 | Mean              | 123.75 |
| SD                | 13.47  | SD              | 20.05  | SD                | 22.16  |
| t                 | 1.73*  | t               | .61    | t                 | 2.07*  |
| P                 | NS     | P               | NS     | P                 | .05    |

## Females

|                   |        |                 |        |                   |        |
|-------------------|--------|-----------------|--------|-------------------|--------|
| Sociology, N=54   |        | History, N=26   |        | Non-College, N=34 |        |
| Mean              | 116.56 | Mean            | 123.38 | Mean              | 110.35 |
| SD                | 22.53  | SD              | 20.58  | SD                | 17.32  |
| Non-College, N=34 |        | Sociology, N=54 |        | History, N=26     |        |
| Mean              | 110.35 | Mean            | 116.56 | Mean              | 123.38 |
| SD                | 17.32  | SD              | 22.53  | SD                | 20.58  |
| t                 | 1.34   | t               | 1.27   | t                 | 2.62   |
| P                 | NS     | P               | NS     | P                 | .01    |

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\*Pooled Variance Formula employed.

Table 29

Radicalism-Conservatism  
Sociology and History Students; Pretest and Posttest

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Sociology Males  
Pretest, N=78

Mean 121.55

---

Sociology Females  
Pretest, N=54

Mean 116.56

Table 29 - continued

| <u>Sociology Males</u> |        | <u>Sociology Females</u> |        |
|------------------------|--------|--------------------------|--------|
| SD                     | 20.05  | SD                       | 22.53  |
| Posttest, N=66         |        | Posttest, N=52           |        |
| Mean                   | 117.79 | Mean                     | 117.40 |
| SD                     | 21.26  | SD                       | 22.82  |
| t                      | 1.05   | t                        | .19    |
| P                      | NS     | P                        | NS     |
| <u>History Males</u>   |        | <u>History Females</u>   |        |
| Pretest, N=55          |        | Pretest, N=26            |        |
| Mean                   | 123.75 | Mean                     | 123.38 |
| SD                     | 22.16  | SD                       | 20.58  |
| Posttest, N=39         |        | Posttest, N=17           |        |
| Mean                   | 127.05 | Mean                     | 120.53 |
| SD                     | 20.79  | SD                       | 21.52  |
| t                      | .68    | t                        | .43    |
| P                      | NS     | P                        | NS     |

Table 30

Radicalism-Conservatism  
Sociology and History Students; Posttest

| <u>Males</u>    |        | <u>Females</u>  |        |
|-----------------|--------|-----------------|--------|
| Sociology, N=66 |        | Sociology, N=52 |        |
| Mean            | 117.79 | Mean            | 117.40 |
| SD              | 21.26  | SD              | 22.82  |
| History, N=39   |        | History, N=17   |        |
| Mean            | 127.05 | Mean            | 120.53 |
| SD              | 20.79  | SD              | 21.52  |

Table 30 - continued

|   | <u>Males</u> |   | <u>Females</u> |
|---|--------------|---|----------------|
| t | 1.96         | t | .49            |
| P | NS           | P | NS             |

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Measurement of Masking

It was intended early in this study to provide some means of measuring individual change in each group under investigation. By having students code their pretests and posttests by indicating the first and last initials of their mother's maiden name, it was hoped it would be possible to identify a given individual's pretest and posttest scores.

Because of the negative reaction to the Prejudice and Rationality subscales by the non-college group, no posttest was given and, hence, it was not possible to measure this group for change. On the same subscales pretest and posttest data were available for only eight individual females and eight individual males in the history classes. Even the total number for whom such data did exist from the sociology classes was low; twenty females and eighteen males. Nonetheless, it was decided to investigate change among selected proportions of the sociology students for possible significance.

Operationally, on each of the subscales both pretest and post-test scores for each individual for whom such data was available were listed and net change calculated. On each subscale and for both sexes those students whose scores had decreased the most and those students whose scores had increased the most were used in calculating whether significant change occurred during the term. In all cases five students who had changed were selected, i.e., twenty-five percent of the females

and twenty-eight percent of the males. The raw scores, net changes and pairs of scores selected for those calculations on the Prejudice and Rationality subscales are given Appendices 1 through 4. Where two or more individual's net change was the same, the selection was made in favor of the lowest pretest score since any changes would be proportionately greater for those with such low pretest scores. In Tables 31 and 32 below, the results of those calculations are given for both sexes.

Table 31  
Prejudice and Rationality Subscales:  
Selected Sociology Males; Increase and Decrease

| <u>Increase</u>       | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-----------------------|-------------------|------------------|--------------------|-------------------|
| Pretest<br>N=5, Mean  | 22.40             | 29.20            | 22.60              | N.A.              |
| SD                    | 8.93              | 8.23             | 6.18               | (N less than 5)   |
| Posttest<br>N=5, Mean | 30.20             | 32.80            | 28.80              |                   |
| SD                    | 11.50             | 8.90             | 7.92               |                   |
| t                     | 1.20              | .66              | 1.38               |                   |
| P                     | NS                | NS               | NS                 |                   |
| <u>Decrease</u>       |                   |                  |                    |                   |
| Pretest<br>N=5, Mean  | 24.00             | 34.60            | 23.80              | 31.00             |
| SD                    | 5.15              | 7.19             | 4.97               | 4.36              |
| Posttest<br>N=5, Mean | 15.80             | 26.60            | 19.20              | 21.00             |
| SD                    | 4.09              | 7.70             | 5.22               | 6.96              |
| t                     | 2.79              | 1.70             | 1.43               | 2.72              |
| P                     | .05               | NS               | NS                 | .05               |

Table 32

Prejudice and Rationality Subscales:  
Selected Sociology Females; Increase and Decrease

| <u>Increase</u>       | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|-----------------------|-------------------|------------------|--------------------|-------------------|
| Pretest<br>N=5, Mean  | 19.80             | 26.60            | 22.40              | 31.80             |
| SD                    | 6.06              | 8.26             | 10.76              | 12.97             |
| Posttest<br>N=5, Mean | 26.00             | 34.40            | 31.40              | 43.00             |
| SD                    | 3.81              | 8.96             | 10.01              | 11.60             |
| t                     | 1.94              | 1.43             | 1.37               | 1.44              |
| P                     | NS                | NS               | NS                 | NS                |
| <u>Decrease</u>       |                   |                  |                    |                   |
| Pretest<br>N=5, Mean  | 30.40             | 40.40            | 32.30              | 32.80             |
| SD                    | 7.02              | 6.50             | 11.37              | 6.84              |
| Posttest<br>N=5, Mean | 21.60             | 34.20            | 24.20              | 22.20             |
| SD                    | 4.75              | 7.37             | 7.89               | 7.02              |
| t                     | 2.33              | 1.41             | 1.28               | 2.42              |
| P                     | .05               | NS               | NS                 | .05               |

As is indicated, both males and females became significantly less biased against blacks in both cases at the .05 confidence level. In addition, both groups became significantly less biased in favor of Jews, also at the .05 level. Otherwise, this procedure failed to show any significant changes on any of the four Prejudice and Rationality Subscales.

Of additional interest is the extent to which these eighteen males and twenty females are representative of the entire population of students who took Introduction to Sociology. For if they do not differ significantly from that population, it can be argued that the changes which they underwent were also true of the remainder of the students who took the course. Table 33 presents data comparing all of the males and females for whom it was possible to identify pretest and posttest scores with the remainder of the sociology students on the basis of pretest scores. Table 34 presents the same calculations on the basis of posttest scores.

Table 33  
Prejudice and Rationality Subscales:  
Selected Sociology Students and Remainder; Pretest

---

| <u>Males</u>               | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=18, Mean | 21.44             | 32.22            | 24.17              | 33.94             |
| SD                         | 6.77              | 7.90             | 5.16               | 4.21              |
| Remainder<br>N=11, Mean    | 22.73             | 27.82            | 26.27              | 29.73             |
| SD                         | 3.71              | 6.12             | 7.14               | 3.57              |
| t                          | .58               | 1.58             | .92                | 1.73              |
| P                          | NS                | NS               | NS                 | NS                |

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Table 33 - continued

| <u>Females</u>             | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=20, Mean | 22.95             | 31.75            | 26.00              | 34.15             |
| SD                         | 7.42              | 8.25             | 8.51               | 8.76              |
| Remainder<br>N=9, Mean     | 24.00             | 26.00            | 28.56              | 31.22             |
| SD                         | 9.57              | 5.50             | 7.62               | 8.17              |
| t                          | .32               | 1.92             | .77                | .85               |
| P                          | NS                | NS               | NS                 | NS                |

---

Table 34

Prejudice and Rationality Subscales:  
Selected Sociology Students and Remainder; Posttest

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| <u>Males</u>               | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----------------------------|-------------------|------------------|--------------------|-------------------|
| Pre/Posttest<br>N=20, Mean | 21.00             | 30.28            | 24.78              | 30.44             |
| SD                         | 9.47              | 8.71             | 6.86               | 8.36              |
| Remainder<br>N=31, Mean    | 21.64             | 33.27            | 25.24              | 29.79             |
| SD                         | 6.46              | 7.20             | 7.08               | 8.15              |
| t                          | .29               | 1.31             | .22                | .27               |
| P                          | NS                | NS               | NS                 | NS                |
| <u>Females</u>             |                   |                  |                    |                   |
| Pre/Posttest<br>N=20, Mean | 22.05             | 32.30            | 28.10              | 33.35             |
| SD                         | 5.26              | 7.12             | 7.09               | 10.39             |
| Remainder<br>N=31, Mean    | 21.35             | 31.90            | 27.16              | 30.16             |



Table 34 - continued

| <u>Females</u> | <u>Anti-Black</u> | <u>Pro-Black</u> | <u>Anti-Jewish</u> | <u>Pro-Jewish</u> |
|----------------|-------------------|------------------|--------------------|-------------------|
| SD             | 8.15              | 8.23             | 7.41               | 9.73              |
| t              | .34               | .13              | .45                | .33               |
| P              | NS                | NS               | NS                 | NS                |

---

As Tables 33 and 34 show, the groups for which both pretest and posttest scores are available do not differ significantly from the remainder of the sociology students. What is true, then, for those whose pretest and posttest scores were identified may be true for the remainder, calling for a partial and tentative rejection of Hypothesis 4. Thus, up to twenty-five percent of the females and twenty-eight percent of the males did change as a result of the course Introduction to Sociology, becoming significantly less biased against blacks and significantly less biased in favor of Jews.

Using the coding technique during Term I, pretest and posttest scores were identified for forty-three sociology males, twenty-eight sociology females, twenty-three history males and eleven history females. Because the number of history females was small, they were not included in the measurement of masking. In the remaining three groups, the twenty-five percent whose scores increased and decreased the most were identified. Thus, changes were calculated for the eleven sociology males, seven sociology females and six history males whose scores had increased the most and for those whose scores had decreased the most. The raw scores of these selected students on the Experimentalism, Dogmatism and Radicalism-Conservatism scales are given in

Appendices 5 through 13. Tables 35, 36 and 37 present the results of those calculations.

As indicated, there was no significant increase or decrease for either sociology females or history males on any of the scales. Sociology males, however, did change. They became significantly more Experimental during the term, at the .001 confidence level. On the Dogmatism scale, masking occurred. Eleven students became more dogmatic while the same number became less dogmatic, at the .02 and .05 confidence levels, respectively. On the Radicalism-Conservatism scale substantial change occurred in both directions, but not at the .05 level. The changes, instead, were at the .10 level of confidence.

Table 35  
Experimentalism:  
Selected Students; Increase and Decrease

| Sociology Males<br>N=11 |       | Sociology Females<br>N=7 |       | History Males<br>N=6 |       |
|-------------------------|-------|--------------------------|-------|----------------------|-------|
|                         |       | Increase                 |       |                      |       |
| Pretest                 |       | Pretest                  |       | Pretest              |       |
| Mean                    | 76.36 | Mean                     | 82.86 | Mean                 | 82.67 |
| SD                      | 6.76  | SD                       | 14.79 | SD                   | 16.75 |
| Posttest                |       | Posttest                 |       | Posttest             |       |
| Mean                    | 88.55 | Mean                     | 97.43 | Mean                 | 95.33 |
| SD                      | 7.05  | SD                       | 13.82 | SD                   | 13.62 |
| t                       | 4.16  | t                        | 1.92  | t                    | 1.42  |
| P                       | .001  | P                        | NS    | P                    | NS    |

Table 35 - continued

| Sociology Males |       | Sociology Females |       | History Males |       |
|-----------------|-------|-------------------|-------|---------------|-------|
|                 |       | Decrease          |       |               |       |
| Pretest         |       | Pretest           |       | Pretest       |       |
| Mean            | 94.55 | Mean              | 88.00 | Mean          | 92.50 |
| SD              | 12.01 | SD                | 13.55 | SD            | 12.14 |
| Posttest        |       | Posttest          |       | Posttest      |       |
| Mean            | 85.73 | Mean              | 79.57 | Mean          | 82.50 |
| SD              | 13.67 | SD                | 13.17 | SD            | 11.99 |
| t               | 1.62  | t                 | 1.19  | t             | 1.42  |
| P               | NS    | P                 | NS    | P             | NS    |

Table 36

Dogmatism:  
Selected Students; Increase and Decrease

| Sociology Males<br>N=11 |       | Sociology Females<br>N=7 |       | History Males<br>N=6 |       |
|-------------------------|-------|--------------------------|-------|----------------------|-------|
|                         |       | Increase                 |       |                      |       |
| Pretest                 |       | Pretest                  |       | Pretest              |       |
| Mean                    | 69.73 | Mean                     | 55.29 | Mean                 | 69.67 |
| SD                      | 11.54 | SD                       | 11.43 | SD                   | 20.89 |
| Posttest                |       | Posttest                 |       | Posttest             |       |
| Mean                    | 81.45 | Mean                     | 61.71 | Mean                 | 88.33 |
| SD                      | 10.38 | SD                       | 10.15 | SD                   | 16.43 |
| t                       | 2.52  | t                        | .87   | t                    | 1.70  |
| P                       | .02   | P                        | NS    | P                    | NS    |

Table 36 - continued

| Sociology Males |       | Sociology Females |       | History Males |       |
|-----------------|-------|-------------------|-------|---------------|-------|
|                 |       | Decrease          |       |               |       |
| Pretest         |       | Pretest           |       | Pretest       |       |
| Mean            | 70.45 | Mean              | 75.43 | Mean          | 82.50 |
| SD              | 20.25 | SD                | 16.87 | SD            | 21.04 |
| Posttest        |       | Posttest          |       | Posttest      |       |
| Mean            | 52.00 | Mean              | 60.29 | Mean          | 61.17 |
| SD              | 16.62 | SD                | 16.02 | SD            | 23.99 |
| t               | 2.35  | t                 | 1.74  | t             | 1.61  |
| P               | .05   | P                 | NS    | P             | NS    |

Table 37

Radicalism-Conservatism:  
Selected Students; Increase and Decrease

| Sociology Males<br>N=11 |        | Sociology Females<br>N=7 |        | History Males<br>N=6 |        |
|-------------------------|--------|--------------------------|--------|----------------------|--------|
|                         |        | Increase                 |        |                      |        |
| Pretest                 |        | Pretest                  |        | Pretest              |        |
| Mean                    | 118.91 | Mean                     | 120.00 | Mean                 | 117.17 |
| SD                      | 16.52  | SD                       | 25.57  | SD                   | 21.90  |
| Posttest                |        | Posttest                 |        | Posttest             |        |
| Mean                    | 132.27 | Mean                     | 132.71 | Mean                 | 136.67 |
| SD                      | 14.04  | SD                       | 20.52  | SD                   | 23.68  |
| t                       | 2.06   | t                        | 1.04   | t                    | 1.47   |
| P                       | NS     | P                        | NS     | P                    | NS     |

Table 37 - continued

| Sociology Males |        | Sociology Females |        | History Males |        |
|-----------------|--------|-------------------|--------|---------------|--------|
|                 |        | Decrease          |        |               |        |
| Pretest         |        | Pretest           |        | Pretest       |        |
| Mean            | 115.64 | Mean              | 115.43 | Mean          | 135.83 |
| SD              | 26.05  | SD                | 21.35  | SD            | 18.65  |
| Posttest        |        | Posttest          |        | Posttest      |        |
| Mean            | 94.82  | Mean              | 98.71  | Mean          | 115.33 |
| SD              | 20.76  | SD                | 22.51  | SD            | 20.84  |
| t               | 2.08   | t                 | 1.45   | t             | 1.79   |
| P               | NS     | P                 | NS     | P             | NS     |

Tables 38, 39 and 40 present comparisons between the three groups for whom pretest and posttest scores were identified and the remainder of the pretest and posttest scores. That is, these tables measure the extent to which the forty-three sociology males, the twenty-eight sociology females and the twenty-three history males are representative of the total population of students who fall into each category on both pretest and posttest scores.

For sociology females and history males, no significant differences between the identified pretested and posttested groups and the remainder is revealed. For sociology males, the forty-three identified students did not differ from the remainder on the Experimental scale. Thus, it is possible to argue tentatively that up to 25 percent of the males who took Introduction to Sociology became significantly more experimental in their personal beliefs. The same males did not differ from the

remainder of sociology males on the Radicalism-Conservatism scale. On the other hand the forty-three males were significantly less dogmatic on their posttest scores than the remainder of the sociology males. Thus, whatever masking occurred within that group of forty-three is not necessarily true of all males in Introduction to Sociology.

Table 38

Experimentalism:  
Selected Students and Remainder; Pretest and Posttest

| Sociology Males      |       | Sociology Females    |       | History Males        |       |
|----------------------|-------|----------------------|-------|----------------------|-------|
| Pretest              |       |                      |       |                      |       |
| Pre/Posttest<br>N=43 |       | Pre/Posttest<br>N=28 |       | Pre/Posttest<br>N=23 |       |
| Mean                 | 86.33 | Mean                 | 84.29 | Mean                 | 85.78 |
| SD                   | 15.00 | SD                   | 12.28 | SD                   | 12.11 |
| Remainder, N=36      |       | Remainder, N=27      |       | Remainder, N=33      |       |
| Mean                 | 85.78 | Mean                 | 87.70 | Mean                 | 83.88 |
| SD                   | 11.56 | SD                   | 13.10 | SD                   | 12.87 |
| t                    | .18   | t                    | .95   | t                    | .57   |
| P                    | NS    | P                    | NS    | P                    | NS    |
| Posttest             |       |                      |       |                      |       |
| Pre/Posttest<br>N=43 |       | Pre/Posttest<br>N=28 |       | Pre/Posttest<br>N=23 |       |
| Mean                 | 87.42 | Mean                 | 87.57 | Mean                 | 85.17 |
| SD                   | 13.68 | SD                   | 12.96 | SD                   | 11.67 |
| Remainder, N=24      |       | Remainder, N=24      |       | Remainder, N=16      |       |

Table 38 - continued

| Sociology Males |       | Sociology Females |       | History Males |       |
|-----------------|-------|-------------------|-------|---------------|-------|
| Mean            | 82.79 | Mean              | 83.29 | Mean          | 82.63 |
| SD              | 11.38 | SD                | 15.32 | SD            | 12.94 |
| t               | 1.46  | t                 | 1.07  | t             | .66   |
| P               | NS    | P                 | NS    | P             | NS    |

Table 39

Dogmatism:  
Selected Students and Remainder; Pretest and Posttest

| Sociology Males      |       | Sociology Females    |       | History Males        |       |
|----------------------|-------|----------------------|-------|----------------------|-------|
| Pretest              |       |                      |       |                      |       |
| Pre/Posttest<br>N=43 |       | Pre/Posttest<br>N=28 |       | Pre/Posttest<br>N=23 |       |
| Mean                 | 69.60 | Mean                 | 69.50 | Mean                 | 70.78 |
| SD                   | 16.13 | SD                   | 17.30 | SD                   | 17.88 |
| Remainder, N=36      |       | Remainder, N=26      |       | Remainder, N=33      |       |
| Mean                 | 74.81 | Mean                 | 67.46 | Mean                 | 68.76 |
| SD                   | 14.42 | SD                   | 19.56 | SD                   | 16.52 |
| t                    | 1.51  | t                    | .40   | t                    | .45   |
| P                    | NS    | P                    | NS    | P                    | NS    |
| Posttest             |       |                      |       |                      |       |
| Pre/Posttest<br>N=43 |       | Pre/Posttest<br>N=28 |       | Pre/Posttest<br>N=23 |       |
| Mean                 | 66.14 | Mean                 | 65.68 | Mean                 | 70.48 |
| SD                   | 19.18 | SD                   | 21.31 | SD                   | 19.13 |

Table 39 - continued

| Sociology Males |       | Sociology Females |       | History Males   |       |
|-----------------|-------|-------------------|-------|-----------------|-------|
| Remainder, N=24 |       | Remainder, N=24   |       | Remainder, N=16 |       |
| Mean            | 79.08 | Mean              | 72.58 | Mean            | 72.63 |
| SD              | 18.91 | SD                | 21.31 | SD              | 15.00 |
| t               | 2.76  | t                 | 1.34  | t               | .39   |
| P               | .01   | P                 | NS    | P               | NS    |

Table 40

Radicalism-Conservatism:  
Selected Students and Remainder; Pretest and Posttest

| Sociology Males      |        | Sociology Females    |        | History Males        |        |
|----------------------|--------|----------------------|--------|----------------------|--------|
| Pretest              |        |                      |        |                      |        |
| Pre/Posttest<br>N=43 |        | Pre/Posttest<br>N=28 |        | Pre/Posttest<br>N=23 |        |
| Mean                 | 119.35 | Mean                 | 121.68 | Mean                 | 126.35 |
| SD                   | 22.41  | SD                   | 20.55  | SD                   | 20.77  |
| Remainder, N=35      |        | Remainder, N=26      |        | Remainder, N=32      |        |
| Mean                 | 124.26 | Mean                 | 111.04 | Mean                 | 121.88 |
| SD                   | 16.61  | SD                   | 23.64  | SD                   | 23.24  |
| t                    | 1.11*  | t                    | 1.74   | t                    | .76    |
| P                    | NS     | P                    | NS     | P                    | NS     |
| Posttest             |        |                      |        |                      |        |
| Pre/Posttest<br>N=43 |        | Pre/Posttest<br>N=28 |        | Pre/Posttest<br>N=23 |        |
| Mean                 | 116.65 | Mean                 | 118.50 | Mean                 | 124.65 |



Table 40 - continued

| Sociology Males |        | Sociology Females |        | History Males   |        |
|-----------------|--------|-------------------|--------|-----------------|--------|
| SD              | 25.02  | SD                | 23.35  | SD              | 21.07  |
| Remainder, N=23 |        | Remainder, N=24   |        | Remainder, N=16 |        |
| Mean            | 119.91 | Mean              | 116.13 | Mean            | 130.50 |
| SD              | 11.57  | SD                | 22.61  | SD              | 20.56  |
| t               | .72*   | t                 | .36    | t               | .89    |
| P               | NS     | P                 | NS     | P               | NS     |

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\*Pooled variance formula employed.

## CHAPTER V

### Summary and Conclusions

Hypotheses 1, 2, and 3 suggest that none of the groups studied differed on the Prejudice and Rationality, Experimentalism, Dogmatism, Radicalism-Conservatism or Authoritarianism scales. The data indicate that Hypothesis 1 cannot be rejected; sociology students do not differ from the Seminole Junior College student body as represented in the Western Civilization 11 classes on any of the above scales.

Hypotheses 2 and 3, which concern both groups of college students compared to the non-college group, are partially rejected. The non-college males were significantly more anti-black than their sociology counterparts, but not more anti-black than the general student body. College attendance, as the research shows, does contribute to the lessening of racial prejudice and the observed difference in this study may be attributable to such attendance. Since, however, the difference existed only between sociology males and non-college males, another factor may have contributed to this result.

Specifically, mean scores were for sociology males 21.93, for history males 24.00, and for the non-college males 28.11. It is possible, then, that Introduction to Sociology tends to attract males who are slightly less biased against blacks than the general student body. Additional evidence supporting this view is the virtually

identical mean score on the anti-Jewish subscale of the Prejudice and Rationality instrument for history and non-college males, 27.86 and 27.64 respectively, while sociology males scored 24.97.

Besides this difference, non-college males were significantly more dogmatic than their college counterparts in both sociology and history classes. Because of the lower mean and modal ages of the non-college groups, the key variable in producing this difference was probably age, the younger students tending to be more dogmatic.

On the Radicalism-Conservatism scale, both non-college males and females were significantly less conservative than the history students. As was true in the case of the observed difference in dogmatism, it seems likely that age is largely responsible for this difference.

Thus Hypothesis 2 is partially rejected. Sociology males were significantly less anti-black and less dogmatic than non-college males. Hypothesis 3 is also partially rejected. History males were less dogmatic than non-college males and both history males and females were more conservative than their non-college counterparts.

Because no posttests were administered to the non-college students, tests of Hypotheses 6, 8 and 9 could not be made. Group tests of Hypotheses 4, 5 and 7 indicate that none can be rejected. That is, students who took Introduction to Sociology and Western Civilization 11 did not change significantly during the terms under study, nor did they differ when compared on posttest scores.

It was only when selected individuals, those for whom pretest

and posttest scores were available, were identified and grouped according to the twenty-five percent whose scores increased and decreased the most that any change was noted. In all cases where significant change did occur that change appears to have been the result of Introduction to Sociology.

Specifically, twenty-eight percent of the sociology males and twenty-five percent of the sociology females became significantly less anti-black, i.e., more rational in their attitudes toward blacks. The same proportions of sociology males and females also became more rational in their attitudes toward Jews by becoming significantly less pro-Jewish. One quarter of the sociology males became significantly more experimental, i.e., came to agree more with the philosophy of the Experimentalism as measured by the Personal Beliefs Inventory. Finally, eleven sociology males became significantly more dogmatic while the same number became significantly less dogmatic as a result of Introduction to Sociology. This data, then, leads to a qualified rejection of Hypothesis 4; some students did change as a result of Introduction to Sociology.

Since the major focus of this study concerned the impact on students of Introduction to Sociology at Seminole Junior College, it can only be stated that at best the impact is limited. Although it appears that the students who elect to take the course are representative of the student body as a whole, their experience in the course does not necessarily produce attitude change. The observed limited impact may be due to the institutional setting in which the course was taught,

viz., a community college. No evidence exists demonstrating that the two-year college has an impact on its students; indeed the one available study found the opposite to be the case. Additional research in this area is obviously needed.

Additional study of the impact of introductory sociology courses probably calls for testing divergent instructional methodologies as well as curricular materials. In other words, it may be that the limited impact of both introductory sociology courses as well as the community college experience itself calls for instructional techniques which are unlike those most often used at the college and university level.

## Appendix 1

Anti-Black and Pro-Black Subscales:  
Selected Sociology Males; Pretest and Posttest Scores

| Anti-Black Subscale |      |       | Pro-Black Subscale |      |      |
|---------------------|------|-------|--------------------|------|------|
| Pre                 | Post | Net   | Pre                | Post | Net  |
| 12                  | 13   | +1    | 17                 | 13   | -4   |
| 12                  | 11   | -1    | 21                 | 23   | +2** |
| 14                  | 12   | -2    | 26                 | 23   | -3   |
| 16                  | 20   | +4**  | 26                 | 34   | +8** |
| 17                  | 20   | +3**  | 28                 | 31   | +3** |
| 17                  | 32   | +15** | 28                 | 23   | -5*  |
| 18                  | 20   | +2    | 28                 | 29   | +1** |
| 18                  | 11   | -7*   | 28                 | 17   | -11* |
| 20                  | 14   | -6*   | 30                 | 31   | +1   |
| 20                  | 15   | -5    | 33                 | 32   | -1   |
| 24                  | 22   | -2    | 34                 | 27   | -7*  |
| 25                  | 15   | -10*  | 34                 | 30   | -4   |
| 25                  | 31   | +6**  | 38                 | 38   | 0    |
| 26                  | 17   | -9*   | 38                 | 38   | 0    |
| 26                  | 26   | 0     | 38                 | 28   | -10* |
| 28                  | 29   | +1    | 43                 | 47   | +4** |
| 31                  | 22   | -9*   | 45                 | 38   | -7*  |
| 37                  | 48   | +11** | 45                 | 43   | -2   |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 2

Anti-Jewish and Pro-Jewish Subscales:  
Selected Sociology Males; Pretest and Posttest Scores

| <u>Anti-Jewish Subscale</u> |      |       | <u>Pro-Jewish Subscale</u> |      |      |
|-----------------------------|------|-------|----------------------------|------|------|
| Pre                         | Post | Net   | Pre                        | Post | Net  |
| 16                          | 26   | +10** | 25                         | 23   | -2   |
| 16                          | 14   | -2*   | 26                         | 11   | -15* |
| 19                          | 21   | +2**  | 27                         | 26   | -1   |
| 21                          | 24   | +3**  | 27                         | 21   | -6*  |
| 21                          | 21   | 0     | 28                         | 32   | +4** |
| 22                          | 22   | 0     | 30                         | 34   | +4** |
| 23                          | 24   | +1    | 31                         | 33   | +2** |
| 23                          | 21   | -2*   | 32                         | 32   | 0    |
| 24                          | 15   | -9*   | 32                         | 28   | -5*  |
| 24                          | 23   | -1    | 34                         | 18   | -16* |
| 24                          | 26   | +2    | 36                         | 27   | -9*  |
| 25                          | 32   | +7**  | 37                         | 34   | -3   |
| 26                          | 26   | 0     | 38                         | 36   | -2   |
| 26                          | 26   | 0     | 39                         | 38   | -1   |
| 27                          | 19   | -8*   | 40                         | 35   | -5   |
| 29                          | 27   | -2*   | 40                         | 37   | -3   |
| 32                          | 41   | +9**  | 42                         | 37   | -5   |
| 37                          | 38   | +1    | 47                         | 46   | -1   |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 3

Anti-Black and Pro-Black Subscales:  
Selected Sociology Females; Pretest and Posttest Scores

| <u>Anti-Black Subscale</u> |      |       | <u>Pro-Black Subscale</u> |      |       |
|----------------------------|------|-------|---------------------------|------|-------|
| Pre                        | Post | Net   | Pre                       | Post | Net   |
| 10                         | 11   | +1    | 14                        | 22   | +8**  |
| 13                         | 20   | +7**  | 20                        | 22   | +2    |
| 14                         | 27   | +13** | 24                        | 23   | -1    |
| 15                         | 16   | +1    | 25                        | 31   | +6**  |
| 18                         | 14   | -4    | 26                        | 23   | -3    |
| 19                         | 21   | +2    | 26                        | 34   | +8**  |
| 20                         | 21   | +1    | 28                        | 26   | -2    |
| 21                         | 20   | -1    | 29                        | 31   | +2    |
| 22                         | 25   | +3**  | 29                        | 31   | +2    |
| 23                         | 23   | 0     | 33                        | 39   | +6**  |
| 23                         | 28   | +5**  | 34                        | 36   | +2    |
| 25                         | 17   | -8*   | 35                        | 30   | -5*   |
| 25                         | 24   | -1    | 35                        | 46   | +11** |
| 25                         | 23   | -2    | 35                        | 27   | -8*   |
| 26                         | 18   | -8*   | 35                        | 37   | +2    |
| 27                         | 20   | -7*   | 37                        | 36   | -1    |
| 27                         | 30   | +3**  | 38                        | 36   | -2    |
| 32                         | 30   | -2    | 38                        | 30   | -8*   |
| 32                         | 25   | -7*   | 44                        | 40   | -4*   |
| 42                         | 28   | -14*  | 50                        | 44   | -6*   |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.



## Appendix 4

Anti-Jewish and Pro-Jewish Subscales:  
Selected Sociology Females; Pretest and Posttest Scores

| <u>Anti-Jewish Subscale</u> |      |       | <u>Pro-Jewish Subscale</u> |      |       |
|-----------------------------|------|-------|----------------------------|------|-------|
| Pre                         | Post | Net   | Pre                        | Post | Net   |
| 15                          | 27   | +12** | 18                         | 33   | +15** |
| 15                          | 24   | +9**  | 22                         | 33   | +11** |
| 15                          | 12   | -3*   | 22                         | 14   | -8*   |
| 18                          | 20   | +2    | 25                         | 26   | +1    |
| 20                          | 28   | +8**  | 25                         | 25   | 0     |
| 21                          | 29   | +8**  | 30                         | 38   | +8**  |
| 22                          | 27   | +5    | 31                         | 35   | +4    |
| 23                          | 26   | +3    | 31                         | 35   | +4    |
| 23                          | 20   | -3    | 32                         | 24   | -8*   |
| 24                          | 28   | +4    | 33                         | 17   | -16*  |
| 25                          | 29   | +4    | 37                         | 24   | -13*  |
| 25                          | 29   | +4    | 37                         | 38   | +1    |
| 27                          | 26   | -1    | 38                         | 34   | -4    |
| 29                          | 34   | +5    | 39                         | 55   | +16** |
| 29                          | 24   | -5*   | 40                         | 32   | -8*   |
| 31                          | 35   | +4    | 41                         | 35   | -6    |
| 33                          | 22   | -11*  | 42                         | 39   | -3    |
| 39                          | 32   | -7*   | 43                         | 40   | -3    |
| 41                          | 49   | +8**  | 47                         | 43   | -4    |
| 45                          | 31   | -14*  | 50                         | 56   | +6**  |

\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 5

Experimentalism Scale:  
Selected Sociology Males; Pretest and Posttest Scores

| Pre | Post | Net   | Pre | Post | Net  |
|-----|------|-------|-----|------|------|
| 52  | 54   | +2    | 84  | 93   | +9** |
| 58  | 60   | +2    | 84  | 91   | +7** |
| 67  | 77   | +10** | 84  | 91   | +7   |
| 69  | 82   | +13** | 86  | 71   | -15* |
| 70  | 87   | +17** | 86  | 95   | +9** |
| 70  | 77   | +7**  | 86  | 91   | +5   |
| 74  | 93   | +19** | 87  | 88   | +1   |
| 74  | 70   | -4    | 93  | 91   | -2   |
| 75  | 77   | +2    | 94  | 91   | -3   |
| 78  | 91   | +13** | 95  | 90   | -5   |
| 78  | 98   | +20** | 97  | 90   | -7*  |
| 79  | 71   | -8*   | 100 | 104  | +4   |
| 79  | 74   | -5    | 102 | 96   | -6*  |
| 79  | 85   | +6    | 103 | 106  | +3   |
| 80  | 90   | +10** | 104 | 98   | -6*  |
| 80  | 78   | -2    | 107 | 99   | -8*  |
| 81  | 72   | -9*   | 107 | 99   | -8*  |
| 82  | 88   | +6    | 108 | 111  | +3   |
| 83  | 80   | -3    | 110 | 102  | -8*  |
| 83  | 71   | -12*  | 112 | 109  | -3   |
| 83  | 83   | 0     | 125 | 121  | -4   |
| 84  | 74   | -10*  |     |      |      |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 6

Dogmatism Scale:  
 Selected Sociology Males; Pretest and Posttest Scores

| Pre | Post | Net   | Pre | Post | Net   |
|-----|------|-------|-----|------|-------|
| 36  | 24   | -12*  | 73  | 65   | -8    |
| 36  | 29   | -7    | 73  | 60   | -13*  |
| 40  | 30   | -10*  | 73  | 65   | -8    |
| 47  | 39   | -8    | 74  | 70   | -4    |
| 48  | 40   | -8    | 80  | 60   | -20*  |
| 50  | 51   | +1    | 81  | 91   | +10** |
| 51  | 42   | -9    | 81  | 75   | -6    |
| 52  | 55   | +3    | 81  | 90   | +9**  |
| 52  | 68   | +16** | 81  | 78   | -3    |
| 57  | 48   | -9    | 82  | 78   | -4    |
| 59  | 68   | +9**  | 83  | 83   | 0     |
| 60  | 89   | +29** | 83  | 74   | -9    |
| 60  | 40   | -20*  | 84  | 92   | +8**  |
| 61  | 61   | 0     | 85  | 84   | -1    |
| 62  | 72   | +10** | 86  | 88   | +2    |
| 65  | 36   | -29*  | 86  | 96   | +10** |
| 65  | 74   | +9**  | 86  | 67   | -19*  |
| 68  | 79   | +11** | 89  | 80   | -9    |
| 69  | 75   | +6    | 90  | 74   | -16*  |
| 69  | 77   | +8**  | 90  | 98   | +8    |
| 70  | 58   | -12*  | 104 | 66   | -38*  |
| 71  | 57   | -14*  |     |      |       |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 7

Radicalism-Conservatism Scale:  
Selected Sociology Males; Pretest and Posttest Scores

| Pre | Post | Net   | Pre | Post | Net   |
|-----|------|-------|-----|------|-------|
| 71  | 67   | -4    | 123 | 114  | -9    |
| 73  | 57   | -16*  | 123 | 132  | +9**  |
| 77  | 68   | -9*   | 124 | 101  | -23*  |
| 84  | 106  | +22** | 125 | 113  | -12*  |
| 91  | 85   | -6    | 127 | 106  | -21*  |
| 93  | 95   | +2    | 127 | 124  | -3    |
| 94  | 78   | -16*  | 129 | 143  | +14** |
| 102 | 98   | -4    | 131 | 129  | -2    |
| 103 | 104  | +1    | 132 | 136  | +4    |
| 104 | 109  | +5    | 133 | 144  | +11** |
| 106 | 103  | -3    | 138 | 137  | -1    |
| 107 | 97   | -10*  | 140 | 153  | +13** |
| 108 | 127  | +19** | 140 | 147  | +7**  |
| 109 | 117  | +8**  | 142 | 130  | -12*  |
| 110 | 91   | -19*  | 144 | 139  | -5    |
| 112 | 114  | +2    | 144 | 106  | -38*  |
| 112 | 125  | +13** | 149 | 96   | -53*  |
| 113 | 125  | +12** | 150 | 142  | -8    |
| 114 | 114  | 0     | 155 | 160  | +5    |
| 117 | 136  | +19** | 155 | 158  | +3    |
| 119 | 113  | -6    | 161 | 157  | -4    |
| 121 | 120  | -1    |     |      |       |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 8

Experimentalism Scale:  
Selected Sociology Females; Pretest and Posttest Scores

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| Pre | Post | Net   | Pre | Post | Net   |
|-----|------|-------|-----|------|-------|
| 59  | 75   | +16** | 87  | 92   | +5    |
| 64  | 73   | +9    | 88  | 95   | +7    |
| 66  | 74   | +8    | 88  | 111  | +23** |
| 69  | 67   | -2    | 90  | 85   | -5*   |
| 70  | 67   | -3*   | 93  | 105  | +12** |
| 70  | 61   | -9*   | 93  | 91   | -2    |
| 72  | 86   | +14** | 93  | 92   | -1    |
| 74  | 90   | +16** | 94  | 105  | +11** |
| 77  | 86   | +9    | 94  | 96   | +2    |
| 77  | 80   | +3    | 95  | 77   | -18*  |
| 85  | 86   | +1    | 98  | 98   | 0     |
| 86  | 95   | +9    | 100 | 110  | +10** |
| 87  | 77   | -10*  | 100 | 92   | -8*   |
| 87  | 88   | +1    | 104 | 98   | -6*   |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 9

Dogmatism Scale:  
Selected Sociology Females; Pretest and Posttest Scores

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| Pre | Post | Net   | Pre | Post | Net  |
|-----|------|-------|-----|------|------|
| 34  | 53   | +19** | 69  | 62   | -7   |
| 45  | 46   | +1**  | 70  | 43   | -27* |
| 46  | 51   | +5**  | 70  | 61   | -9*  |
| 53  | 53   | 0     | 71  | 66   | -5   |
| 54  | 44   | -10*  | 77  | 84   | +7** |
| 55  | 61   | +6**  | 77  | 77   | 0    |
| 58  | 57   | -1    | 79  | 76   | -3   |
| 59  | 60   | +1    | 80  | 68   | -12* |
| 60  | 47   | -13*  | 81  | 78   | -3   |
| 62  | 54   | -8    | 83  | 81   | -2   |
| 64  | 67   | +3**  | 93  | 91   | -2   |
| 66  | 64   | -2    | 97  | 80   | -17* |
| 66  | 70   | +4**  | 97  | 79   | -18* |
| 68  | 61   | -7    | 112 | 105  | -7   |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 10

Radicalism-Conservatism Scale:  
Selected Sociology Females; Pretest and Posttest Scores

| Pre | Post | Net   | Pre | Post | Net   |
|-----|------|-------|-----|------|-------|
| 77  | 113  | +36** | 121 | 102  | -19*  |
| 86  | 63   | -23*  | 124 | 120  | -4    |
| 96  | 83   | -13*  | 125 | 121  | -4    |
| 97  | 90   | -7    | 125 | 104  | -21*  |
| 101 | 89   | -12*  | 132 | 134  | +2    |
| 106 | 109  | +3**  | 135 | 137  | +2    |
| 109 | 100  | -9    | 135 | 144  | +9**  |
| 110 | 122  | +12** | 136 | 142  | +6**  |
| 111 | 101  | -10   | 139 | 124  | -15*  |
| 116 | 108  | -8    | 139 | 141  | +2    |
| 116 | 112  | -4    | 140 | 126  | -14*  |
| 118 | 112  | -6    | 149 | 137  | -12   |
| 120 | 131  | +11** | 156 | 168  | +12** |
| 120 | 123  | +3    | 168 | 162  | -6    |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 11

Experimentalism Scale:  
Selected History Males; Pretest and Posttest Scores

| Pre | Post | Net   | Pre | Post | Net   |
|-----|------|-------|-----|------|-------|
| 64  | 66   | +2    | 86  | 80   | -6    |
| 66  | 82   | +16** | 87  | 79   | -8    |
| 71  | 82   | +11** | 90  | 101  | +11** |
| 74  | 91   | +17** | 91  | 92   | +1    |
| 75  | 74   | -1    | 91  | 80   | -11*  |
| 78  | 70   | -8*   | 92  | 86   | -6    |
| 80  | 69   | -11*  | 94  | 86   | -8    |
| 82  | 81   | -1    | 95  | 86   | -9*   |
| 82  | 78   | -4    | 102 | 90   | -12*  |
| 83  | 98   | +15** | 109 | 100  | -9*   |
| 84  | 82   | -2    | 112 | 118  | +6**  |
| 85  | 88   | +3    |     |      |       |

---

\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.



## Appendix 12

Dogmatism Scale:  
Selected History Males; Pretest and Posttest Scores

| Pre | Post | Net   | Pre | Post | Net   |
|-----|------|-------|-----|------|-------|
| 36  | 43   | +7    | 72  | 71   | -1    |
| 43  | 67   | +24** | 73  | 49   | -24*  |
| 55  | 55   | 0     | 73  | 85   | +12** |
| 56  | 92   | +36** | 73  | 75   | +2    |
| 57  | 60   | +3    | 74  | 59   | -15*  |
| 60  | 49   | -11*  | 74  | 96   | +22** |
| 65  | 65   | 0     | 78  | 45   | -33*  |
| 65  | 76   | +11** | 80  | 81   | +1    |
| 67  | 61   | -6    | 89  | 56   | -33*  |
| 70  | 73   | +3    | 105 | 114  | +9**  |
| 71  | 74   | +3    | 121 | 109  | -12*  |
| 71  | 66   | -5    |     |      |       |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

## Appendix 13

Radicalism-Conservatism Scale:  
Selected History Males; Pretest and Posttest Scores

| Pre | Post | Net   | Pre | Post | Net   |
|-----|------|-------|-----|------|-------|
| 86  | 99   | +13** | 131 | 148  | +17** |
| 103 | 100  | -3    | 132 | 122  | -10   |
| 104 | 115  | +11** | 137 | 133  | -4    |
| 105 | 76   | -29*  | 137 | 156  | +19** |
| 105 | 152  | +47** | 138 | 117  | -21*  |
| 106 | 112  | +6    | 139 | 130  | -9    |
| 113 | 116  | +3    | 140 | 150  | +10** |
| 113 | 106  | -7    | 141 | 128  | -13*  |
| 116 | 115  | -1    | 148 | 136  | -12*  |
| 123 | 121  | -2    | 158 | 121  | -37*  |
| 125 | 114  | -11*  | 177 | 169  | -8    |
| 129 | 131  | +2    |     |      |       |

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\*Pretest and posttest scores used in calculating decrease.

\*\*Pretest and posttest scores used in calculating increase.

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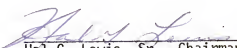
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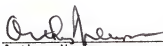
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

  
Hal G. Lewis, Sr., Chairman  
Professor of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

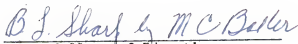
  
Arthur Newman  
Assistant Professor of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

  
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Professor of Sociology

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Education.

June, 1974

  
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